

DELHI UNIVERSITY
LIBRARY

DELHI UNIVERSITY LIBRARY

Cl. No. V6:1:N3

68⁹⁰⁶

Date of release for loan

Ac. No. 88542

This book should be returned on or before the date last stamped below.

An overdue charge of one anna will be charged for each day the book is kept overtime.

AN
AFRICAN SURVEY

AN AFRICAN SURVEY

*A STUDY OF PROBLEMS ARISING IN
AFRICA SOUTH OF THE SAHARA*

BY

LORD HAILEY, G.C.S.I., G.C.I.E.

*Issued by the Committee of the
African Research Survey
under the auspices of the
Royal Institute of International Affairs*

OXFORD UNIVERSITY PRESS
LONDON NEW YORK TORONTO

1938

OXFORD UNIVERSITY PRESS
AMEN HOUSE, E.C. 4
London Edinburgh Glasgow New York
Toronto Melbourne Capetown Bombay
Calcutta Madras
HUMPHREY MILFORD

PRINTED IN GREAT BRITAIN

FOREWORD

GENERAL SMUTS, in the course of the Rhodes Memorial Lecture which he delivered at Oxford in 1929, pointed out that Africa was developing under the control of a number of European powers, that different and often conflicting principles were being applied by them in the administrative, social, educational, and legal fields, and that nowhere was there any survey of what was taking place in Africa as a whole. He pleaded eloquently for the compilation of such a survey, which would include a review of the extent to which modern knowledge was being applied to African problems. As a result a committee (the names of whose members are given on p. vii) was formed to carry the project into execution. The Carnegie Corporation of New York, with characteristic vision, made its execution possible by a generous grant of funds, which was later supplemented by the Rhodes Trustees; and Lord Hailey, then Governor of the United Provinces in India, agreed to undertake the Directorship of the Survey, on his retirement from India.

Owing to claims upon his services by the Government of India, Lord Hailey was not free to begin his inquiries until the beginning of 1935, but certain preparatory researches were commissioned by the end of 1933. It had from the first been decided that the Survey, while giving all the information necessary for the appreciation of the problems under discussion, should treat the problems themselves in as objective a spirit as possible; that its weight should lie in the full statement of fact rather than in the expressions of opinions. The scale and the complexity of Africa's problems, however, which became clear to the Director during his year's tour in that continent, made it impracticable to limit the work to the preliminary general report originally contemplated. This expansion in the scope of the work has delayed the issue of the report of the Survey beyond the date at which the Committee had aimed, a delay which has been increased by the illness of the Director for some months during the winter of 1937 and the early part of the present year.

The Committee believe that Lord Hailey's Survey brings to the

problems of a continent which has excited at various times heroism, greed, pity, political passion, and a scramble for control, a clear and objective study of significant facts on a scale and of a quality never previously available. They believe that this volume will mark a new era in the history of that continent, not only from the quality of the work itself but because it will enable those who are responsible for policy to consider it in the light of the problems of Africa, south of the Sahara, as a whole. They wish to express their deep appreciation of the remarkable contribution, which Lord Hailey has made to the solution of African problems at a sacrifice of health, leisure, and time which it is difficult to assess, and to pay their tribute to the unremitting labour which his assistants on the Survey have contributed, and without which the task would never have been concluded. They are under special obligations to their Secretary, Miss Hilda Matheson, who has since 1933 taken a very important part in organizing the work of the Survey. The Committee hope that this comprehensive examination of African problems by persons specially qualified for the task will be studied by all who are connected with Africa, or who, as citizens of colonial powers, share responsibility for its right development.

While the Committee have from time to time discussed problems of the Survey with the Director, the scope and form of the report, and any expressions of opinion contained in it, are those of Lord Hailey himself. The recommendations contained in Chapter XXIV were, however, discussed with the Executive Committee, by whom they were endorsed. It should also be added that the Carnegie Corporation of New York are not to be understood as having any responsibility for statements made or views contained in it.

In conclusion, the Committee are greatly indebted to the Council of Chatham House for kindly acting as trustees for the funds of the Survey, for accommodating its staff, and for placing all the services and facilities of the Institute at their disposal.

LOTHIAN

AFRICAN RESEARCH SURVEY

GENERAL COMMITTEE

THE MOST HON. THE MARQUESS OF LOTHIAN, C.H. (*Chairman*)

HENRY CLAY, ESQ., *Economic Adviser to the Bank of England*

REGINALD COUPLAND, ESQ., C.I.E., *Beit Professor of Colonial History, Oxford*

LIONEL CURTIS, ESQ., *Fellow of All Souls College, Oxford*

SIR RICHARD GREGORY, BT., F.R.S., *Editor of Nature*

JULIAN S. HUXLEY, ESQ., F.R.S., D.SC., *Secretary, Zoological Society, London*

THE RIGHT HON. THE LORD LUGARD, G.C.M.G., C.B., D.S.O.

IVISON S. MACADAM, ESQ., C.B.E., M.V.O., *Secretary, Royal Institute of International Affairs*

DR. J. H. OLDHAM, *International Institute of African Languages and Cultures*

SIR JOHN ORR, D.S.O., M.C., F.R.S., *Director, Rowett Research Institute, Aberdeen*

SIR ARTHUR SALTER, K.C.B., *Gladstone Professor of Political Theory and Institutions, Oxford*

Director:

THE LORD HAILEY, G.C.S.I., G.C.I.E.

Secretary:

MISS HILDA MATHESON

CONTENTS

FOREWORD BY THE MARQUESS OF LOTHIAN, C.H.	v
GENERAL COMMITTEE	vii
TABLES	xviii
MAPS	xix
THE APPROACH TO AFRICAN PROBLEMS	xxi

CHAPTER I

THE PHYSICAL BACKGROUND

I. GENERAL DESCRIPTION	1
II. SURVEY AND MAPPING	4
(a) General Problems	4
(b) Organization	5
(c) Geodetic Survey	6
(d) Cadastral and Topographical Survey	8
(e) Methods of Projection	8
(f) Air Survey	10
III. CLIMATE AND VEGETATION	11
IV. CLIMATOLOGY AND METEOROLOGY	15

CHAPTER II

THE AFRICAN PEOPLES

I. GENERAL DESCRIPTION	18
(a) The Bantu People	22
(b) The Negro Tribes	26
(c) Hamitic Tribes	29
(d) Religious Beliefs and Social Concepts	29
II. PROBLEMS OF ETHNIC CLASSIFICATION	32
III. STUDIES IN AFRICAN SOCIAL LIFE	40
(a) The Knowledge of African Life and Custom	40
(b) Aims and Methods of Social Anthropology	42
(c) Governments and Anthropological Inquiry	45
(d) Government Officers' Note-books	49
(e) Institutions for Teaching and Research	51
(f) The Future of Anthropological Inquiries	56
(g) Bibliography	59

CHAPTER III

THE STUDY OF THE AFRICAN LANGUAGES

I. INTRODUCTION	68
II. INSTITUTIONS FOR THE STUDY AND TEACHING OF AFRICAN LANGUAGES	70

III. THE CLASSIFICATION OF AFRICAN LANGUAGES	74
IV. THE PROBLEM OF ORTHOGRAPHY	78
V. ACTION TAKEN IN REGARD TO THE NATIVE VERNACULARS IN THE DIFFERENT TERRITORIES	81
VI. THE INFLUENCE OF EDUCATIONAL POLICY ON LINGUISTIC DEVELOP- MENT	97
VII. DEVELOPMENTS IN LINGUISTIC RESEARCH	99

CHAPTER IV

✓ POPULATION RECORDS

I. INTRODUCTION	103
II. ESTIMATES OF POPULATION	104
III. METHODS OF ENUMERATION AND REGISTRATION	109
IV. GENERAL OBSERVATIONS	124

CHAPTER V

POLITICAL AND SOCIAL OBJECTIVES IN GOVERN- MENT	130
--	-----

CHAPTER VI

SYSTEMS OF GOVERNMENT

I. THE UNION OF SOUTH AFRICA	144
II. SOUTH-WEST AFRICA	155
III. SOUTHERN RHODESIA	157
IV. THE BRITISH CROWN COLONIES	160
V. RE-GROUPING OF ADMINISTRATIVE UNITS	173
VI. THE FRENCH SYSTEM	185
VII. THE BELGIAN SYSTEM	206
VIII. THE PORTUGUESE SYSTEM	213
IX. THE PERMANENT MANDATES COMMISSION	216
X. ADMINISTRATIVE STAFF	220
XI. CONCLUSIONS	246

CHAPTER VII

LAW AND JUSTICE

I. THE INTRODUCTION OF A SYSTEM OF LAW	261
II. THE SOURCES OF LAW AND ITS GENERAL CHARACTER	267
III. THE ADMINISTRATION OF JUSTICE	280
IV. PROBLEMS ARISING IN REGARD TO THE ADMINISTRATION OF JUSTICE	294
V. PUNISHMENTS	309
VI. A FINAL NOTE	315

CHAPTER VIII

THE NON-EUROPEAN IMMIGRANT COMMUNITIES

I. THE ARAB COMMUNITY	317
II. THE INDIAN COMMUNITY	317
(a) Historical	317
(b) Indians in South Africa	318
(c) " " Kenya	335
(d) " " Tanganyika	340
(e) " " Uganda	342

CHAPTER IX

NATIVE ADMINISTRATION

I. INTRODUCTION	345
II. SOUTH AFRICA	346
III. SOUTH-WEST AFRICA	373
IV. SOUTHERN RHODESIA	376
V. KENYA	382
VI. THE HIGH COMMISSION TERRITORIES	393
VII. TERRITORIES UNDER INDIRECT RULE	413
VIII. NIGERIA	416
IX. BRITISH CAMEROONS	433
X. TANGANYIKA TERRITORY	434
XI. UGANDA	443
XII. NORTHERN RHODESIA	452
XIII. NYASALAND	462
XIV. THE GOLD COAST	465
XV. TOGOLAND	477
XVI. SIERRA LEONE	480
XVII. THE GAMBIA	482
XVIII. THE FRENCH TERRITORIES	484
XIX. THE BELGIAN CONGO	491
XX. NATIVES IN NON-TRIBAL AREAS	496
XXI. CONCLUSIONS	527

CHAPTER X

SYSTEMS OF DIRECT TAXATION

I. INTRODUCTION	546
II. DIRECT TAXATION OF NON-NATIVES	546
III. SYSTEMS OF NATIVE TAXATION	554
IV. CONCLUSIONS	594

CHAPTER XI

THE PROBLEMS OF LABOUR

I. INTRODUCTION	603
II. COMMUNAL AND COMPULSORY LABOUR	608
III. COMPULSION FOR THE STIMULATION OF NATIVE AGRICULTURAL PRODUCTION	630
IV. LABOUR IN PRIVATE EMPLOYMENT: EVOLUTION OF THE PRESENT POSITION	635
V. PRIVATE EMPLOYMENT: THE REGULATION OF RECRUITMENT	651
VI. PENAL SANCTIONS.	659
VII. REGULATIONS IN THE NATURE OF PASS LAWS	664
VIII. WELFARE AND WAGES	672
IX. GENERAL CONCLUSIONS	692

CHAPTER XII

THE STATE AND THE LAND

I. A COMPARISON OF COLONIAL LAND POLICIES	712
(a) Introduction	712
(b) South Africa	718
(c) South-West Africa	725
(d) The High Commission Territories	728
(e) Southern Rhodesia	732
(f) Northern Rhodesia	738
(g) Kenya	742
(h) Nyasaland	755
(i) Uganda	759
(j) Tanganyika	763
(k) Nigeria	768
(l) The British Cameroons	774
(m) The Gold Coast and Togoland	775
(n) The Gambia and Sierra Leone	780
(o) The French Colonies	782
(p) The French Cameroons	788
(q) The Belgian Congo	790
(r) Ruanda-Urundi	795
(s) The Portuguese Colonies	796
(t) The Legal Basis of Land Alienation	798
(u) The Reserve Policy	803
(v) European Land Settlement	814
(w) The Control of Alienation	822
II. PRIVATE RIGHTS IN LAND	829
(a) Native Land Tenure	829
(b) Studies of Land Tenure	836
(c) Changes in Land Tenure	842
(d) A Review of Present Policies	863
(e) The Future Form of Title in Land	868
(f) The Machinery for Recording Title	876

CHAPTER XIII
AGRICULTURE

I. INTRODUCTION	879
(a) The Basic Methods of Native Agriculture	879
(b) Cattle-owning Tribes	882
(c) The Introduction of New Crops and Domestic Animals	883
(d) The Recent Development of Native Agriculture	884
(e) Game as a Food Supply	887
II. AGRICULTURAL PRODUCTION BY NATIVES	888
III. AGRICULTURAL PRODUCTION BY EUROPEANS	918
IV. ANIMAL HUSBANDRY	929
V. AGRICULTURAL RESEARCH	943
VI. THE IMPROVEMENT OF NATIVE AGRICULTURE	960
VII. THE IMPROVEMENT OF ANIMAL HUSBANDRY	971
VIII. SOME FURTHER CONCLUSIONS	978

CHAPTER XIV
FORESTS

I. THE GENERAL POSITION	984
II. FORESTRY WORK IN THE VARIOUS TERRITORIES	987
III. ORGANIZATION FOR FORESTRY RESEARCH.	1008
IV. FOREST BOTANY, ECOLOGY, AND STOCK-TAKING	1010
V. THE INTRODUCTION OF EXOTIC TREES	1012
VI. TIMBERS	1013
VII. MINOR FOREST PRODUCTS	1014
VIII. FOREST PESTS AND DISEASES	1017
IX. CONCLUSIONS	1018

CHAPTER XV
THE PROBLEM OF WATER SUPPLY

I. GENERAL CONDITIONS OF THE PROBLEM	1025
II. DEVELOPMENT IN DIFFERENT TERRITORIES	1026
III. FUTURE LINES OF DEVELOPMENT	1052
IV. THE DEVELOPMENT OF MAJOR IRRIGATION WORKS BY PRIVATE CAPITAL	1053

CHAPTER XVI
SOIL EROSION

I. TYPES AND EFFECTS OF EROSION	1056
II. CONTROL OF EROSION	1063
III. EROSION AS A WORLD PROBLEM	1071
IV. THE SITUATION IN DIFFERENT TERRITORIES OF AFRICA	1077
V. CONCLUSION	1106

CHAPTER XVII

HEALTH

I. THE BEGINNINGS OF MEDICAL WORK IN AFRICA	1115
II. THE PRINCIPAL DISEASES IN AFRICA	1122
III. INTERNATIONAL ORGANIZATION OF HEALTH WORK	1152
IV. ORGANIZATION OF HEALTH SERVICES IN BRITISH TERRITORIES IN AFRICA	1154
V. ORGANIZATION OF MEDICAL SERVICES IN FRENCH TERRITORIES	1171
VI. ORGANIZATION OF MEDICAL SERVICES IN THE BELGIAN CONGO AND RUANDA-URUNDI	1178
VII. ORGANIZATION OF MEDICAL SERVICES IN PORTUGUESE TERRITORIES	1181
VIII. MEDICAL EDUCATION OF AFRICANS	1182
IX. HEALTH POLICIES IN AFRICA	1193

CHAPTER XVIII

EDUCATION

I. THE GENERAL NATURE OF THE PROBLEM	1207
II. THE UNION OF SOUTH AFRICA	1209
(a) European Education	1209
(b) The University Institutions	1210
(c) The Two Official Languages	1212
(d) The Finance and Control of Native Education	1213
(e) Higher Education for Natives	1217
(f) The Content of Native Education	1218
(g) The Linguistic Problem in Native Schools	1223
III. SOUTHERN RHODESIA	1224
IV. BRITISH COLONIAL AREAS	1229
(a) Education Policy	1229
(b) Education Administration	1233
(c) The Missionary Schools	1235
(d) Native Interest in Education	1239
(e) Extent of Secondary Education	1242
(f) Vocational Training	1243
(g) Higher Education	1248
(h) Teacher Training	1250
(i) The Dependence on External Examination Standards	1253
(j) Education of Women and Girls	1255
(k) The Education of Chiefs	1256
(l) The Language of Instruction	1257
(m) European and Indian Education	1259
V. THE FRENCH TERRITORIES	1260
VI. THE BELGIAN TERRITORIES	1269
VII. THE PORTUGUESE COLONIES	1277

CONTENTS		xv
VIII. A GENERAL REVIEW		1278
(a) Principles Applicable to Native Education		1278
(b) Popular Education		1280
(c) The Payment of Fees		1286
(d) Higher Education		1288
(e) Native Art and Music in Education		1290
IX. CULTURAL AGENCIES		1291
(a) The Communication of Ideas		1291
(b) Books and Newspapers		1292
(c) Broadcasting		1296
(d) The Cinema		1300
X. STATISTICAL SUMMARY SHOWING SCHOOL POPULATION AND EXPENDITURE		1304

CHAPTER XIX

THE EXTERNAL ASPECT OF AFRICAN ECONOMIC DEVELOPMENT

I. THE HISTORICAL BACKGROUND	1309
II. THE DEVELOPMENT OF AFRICA BY FOREIGN CAPITAL	1315
III. AFRICA'S SHARE IN WORLD TRADE	1324
IV. THE DESTINATIONS OF AFRICAN EXPORTS	1329
V. THE SOURCES OF AFRICAN IMPORTS	1334
VI. THE BALANCE OF TRADE	1348
VII. STATISTICS	1352
VIII. GENERAL CONCLUSIONS	1354

CHAPTER XX

THE INTERNAL ASPECT OF AFRICAN ECONOMIC DEVELOPMENT

I. INTRODUCTION	1359
II. THE EUROPEAN ECONOMY	1361
III. THE NATIVE ECONOMY	1405
IV. PUBLIC FINANCES	1432

CHAPTER XXI

CO-OPERATIVE ORGANIZATION

I. THE USE OF CO-OPERATIVE SOCIETIES	1466
II. CO-OPERATIVE ORGANIZATION AMONG EUROPEANS	1467
III. CO-OPERATIVE ORGANIZATION AMONG NATIVES IN SOUTHERN AFRICA	1470
IV. NATIVE CO-OPERATIVE ORGANIZATIONS IN BRITISH COLONIAL TERRITORIES	1471

V. THE ORGANIZATION IN FRENCH TERRITORIES	1477
VI. THE ORGANIZATION IN BELGIAN AND PORTUGUESE TERRITORIES	1480
VII. GENERAL CONCLUSIONS	1481

CHAPTER XXII

MINERALS AND MINES

I. INTRODUCTORY AND HISTORICAL	1484
II. MINERAL DEVELOPMENT IN DIFFERENT TERRITORIES	1487
III. DEVELOPMENT OF THE DIAMOND INDUSTRY	1509
IV. ADMINISTRATIONS AND THE MINERAL INDUSTRY	1515
(a) State Mining.	1515
(b) Geological and Mineral Surveys	1516
(c) The Ownership of Mineral Rights	1518
(d) Prospecting in Native Lands.	1521
(e) Regulations Regarding Prospecting and Mining	1522
(f) Revenue and Taxation	1529
(g) Tax on Profits	1531
V. LINES OF FUTURE DEVELOPMENT	1534

CHAPTER XXIII

TRANSPORT AND COMMUNICATIONS

I. INTRODUCTION	1537
II. HEAD PORTERAGE	1539
III. WATER TRANSPORT.	1540
IV. ROADS	1549
V. RAILWAYS	1565
VI. AIR TRANSPORT	1596

CHAPTER XXIV

THE FUTURE OF AFRICAN STUDIES

I. THE SCOPE FOR RESEARCH INTO AFRICAN PROBLEMS	1611
II. OFFICIAL INQUIRIES	1614
III. THE AGENCIES NOW RESPONSIBLE FOR RESEARCH	1615
IV. THE CENTRAL DIRECTION OF RESEARCH	1624
V. THE CREATION OF A SPECIAL FUND FOR RESEARCH	1629
VI. THE INSTITUTION OF A BUREAU OF INFORMATION	1633

CHAPTER XXV

SUMMARY AND CONCLUSIONS

I. THE PHYSICAL BACKGROUND	1636
II. THE AFRICAN PEOPLES	1637
III. THE STUDY OF AFRICAN LANGUAGES	1638

CONTENTS		xvii
IV. POPULATION RECORDS	.	1638
V. POLITICAL AND SOCIAL OBJECTIVES	.	1639
VI. SYSTEMS OF GOVERNMENT	.	1641
VII. LAW AND JUSTICE	.	1643
VIII. THE NON-EUROPEAN IMMIGRANT COMMUNITIES	.	1644
IX. NATIVE ADMINISTRATION	.	1645
X. SYSTEMS OF DIRECT TAXATION	.	1647
XI. THE PROBLEMS OF LABOUR	.	1647
XII. THE LAND	.	1649
XIII. AGRICULTURE AND ANIMAL HUSBANDRY	.	1650
XIV. FORESTS	.	1652
XV. THE PROBLEMS OF WATER SUPPLY	.	1652
XVI. EROSION	.	1653
XVII. HEALTH	.	1653
XVIII. EDUCATION	.	1655
XIX. THE EXTERNAL ASPECT OF ECONOMIC DEVELOPMENT	.	1656
XX. THE INTERNAL ASPECT OF ECONOMIC DEVELOPMENT	.	1657
XXI. CO-OPERATIVE ORGANIZATION	.	1660
XXII. MINERAL AND MINES	.	1660
XXIII. TRANSPORT	.	1661
XXIV. THE FUTURE OF AFRICAN STUDIES	.	1662
ACKNOWLEDGEMENTS	.	1665
INDEX	.	1667

TABLES

I. Total Population of Area included in the Survey	108
II. European Population 1935-6	109
III. European Staff in British Colonial Territories	226
IV. Growth of Indian and European Population in Kenya	335
V. Non-European Immigrant Communities: Revenue and Expenditure in Kenya	339
VI. Incidence of Direct Taxation on Natives and Non-Natives in 1934	547
VII. Allocation of Native Areas in the Union	723
VIII. Proposed Distribution of Land in Southern Rhodesia	737
IX. Land Situation in Northern Rhodesia	741
X. Percentages of Native Pupils in Different School Years	1308
XI. Government Expenditure on Education	<i>facing p.</i> 1308
XII. Railway Systems in Africa. Capital Expenditure to 1934	1317
XIII. British Territories: Analysis of Expenditure (Estimates for 1936-7)	1433
XIV. French Territories: Analysis of Expenditure (Estimates for 1937)	1454
XV. Belgian Territories: Analysis of Actual Expenditure (1935 and 1936)	1456
XVI. Diamond Production in Metric Carats	1512
XVII. Table of Measures used in the Survey	1663

MAPS

Map showing Density of Population	<i>facing p.</i>	18
Map showing Principal Language Groups	„	68
Map showing Principal Railways	„	1537
Political Map of Africa (<i>coloured</i>)	<i>end of volume</i>	
Physical Map of Africa (<i>coloured</i>)	<i>inset</i>	
Vegetation Map of Africa (<i>coloured</i>)	<i>inset</i>	

THE APPROACH TO AFRICAN PROBLEMS

AS the *Foreword* to this volume has explained, the Survey has in some respects exceeded the scope of the suggestion made in General Smuts's lecture of 1929, to which it owes its origin. In the form which it has now taken, it is not limited to a discussion of the state of our knowledge regarding the problems which are involved in the development of Africa; it attempts also to describe the physical and social background out of which these problems have arisen, and to analyse the factors which, so far as can now be seen, must determine their solution.

In approaching a task of so wide a range, it has been necessary to place some limitation on the extent of the work involved. It was decided, in the first place, to confine the Survey to that part of Africa which may be roughly described as lying south of the Sahara. The intention of this decision was to exclude those areas of the continent which have come under Mediterranean littoral influences. It must be admitted, however, that in the result the line actually adopted as the northern limit of the Survey has been chosen largely as a matter of convenience, and does not correspond closely to political or ethnic distinctions. It runs along the northern boundary of the territories included in French West and French Equatorial Africa, the Congo, Uganda, and Kenya; the Survey does not, in consequence, include Ethiopia and other Italian possessions, or the Anglo-Egyptian Sudan. The exclusion of this last territory is regretted, since the problems of its southern area closely resemble those of Uganda and the north of French Equatorial Africa. The Survey has, again, been confined to the mainland, with the result that both Zanzibar and Madagascar fall outside its scope. Within the area which it covers, chief attention has been given to the Union of South Africa and the British, French, and Belgian colonies and mandated territories, partly because it is in these areas that the problems of development are most important, and partly owing to the lack of opportunity for more than a brief visit to the Portuguese possessions.

Mozambique and Angola consequently occupy a relatively unimportant place in the Survey. Liberia has been omitted.

In the second place it was decided that the treatment adopted should as far as possible be of a factual and objective character. It has, indeed, been felt that, apart from any question of limiting the scope of the work, there is some positive advantage in this course. The Survey ranges over an area in which a Dominion of the British Commonwealth and four European Powers are engaged in a common task, though in some respects with widely different methods of approach. In conditions of such diversity, generalization is more than usually dangerous, while any endeavour to assess the merits of policy or to judge of the manner of its application is liable to be treated as an attempt to satisfy one national outlook at the expense of another. The sole object for undertaking the Survey was the hope that it might prove of some service to the Powers which have possession of territories in Africa, and of some benefit to the African people. It has been felt that this purpose could best be served by a statement as largely as possible of a factual nature, so arranged as to enable the different administrations to appreciate the extent to which their problems are shared by their neighbours, and to inform themselves of the measures which are being taken to meet them. In such circumstances a comparative study of fact can possibly prove of greater value than an expression of opinion or an attempt at judgement, on whatever authority it may be made.

Statements of fact, however, are not only apt to be less arresting and more laborious than expressions of opinion, but involve their own difficulties and indeed their own hazards. Material of the nature of that for which this Survey has sought has to be collected from a great variety of sources; it is not always readily accessible, and there are, indeed, some administrations in Africa which practise a noticeable economy in making information available to the public. The Survey has proved to be something of a pioneer effort, and those who are responsible for the present volume are fully conscious that it must contain some mis-statements and many omissions. They have, however, preferred to publish it in its present form, rather than incur the delay which would be involved in any attempt to remove its defects. There will be found

later in the volume¹ a list of the many authorities who have generously given their help or advice at various stages of the Survey; they are responsible for any merits it may display, but not for any views, and still less for any errors, which it may contain. There are also some more general obligations which it is proper to acknowledge here. The Survey has had the benefit of the good offices of the Colonial Office in London, of the staff of the High Commissioner for South Africa, and of the Colonial Ministries in Paris, Brussels, and Lisbon. It is under a great obligation, often of a personal nature, to the Government of South Africa and to the heads of many of the African administrations, both British and non-British, and a large number of their officers. A full use has been made of the valuable material contained in Lord Lugard's classical work, *The Dual Mandate in British Tropical Africa*, and of Mr. R. L. Buell's two volumes, *The Native Problem in Africa*. In addition, much expert assistance has been received from M. Louwers, the secretary of the *Institut Colonial International* at Brussels, from the staff of the Libraries of the Colonial Office, the Royal Empire Society, South Africa House, and the Royal Institute of International Affairs, and from Sir Alan Pim, who has advised in detail on many of the chapters.

The claim made by Germany for the return of her former colonies has during recent years given occasion for much discussion regarding the value which may be attached, from one standpoint or another, to the possession of colonies. It is, however, possible that history, looking back in retrospect on the part played by Imperial Powers in Africa, will be more concerned with the nature of the contribution which the European occupation will have made to the future of the African peoples, than with the profit or loss which the African connexion may have brought to Europe. The share which colonial Africa takes in the total commerce of the world is less than might be supposed,² and her capacity for accommodating the surplus population of Europe is limited. On the other hand, the type of civilization which will

¹ See pp. 1665-6.

² Chap. XX, pp. 1324-5.

ultimately characterize the population of so considerable a portion of the earth's surface is a matter of great concern to the world at large. It is true that African temperament and character must in the long run largely determine the form which African civilization must take; but the pace and the direction of its evolution will be influenced by the nature of the social and political institutions which the policy of the Colonial Powers leads them to establish, and of the facilities for development which they provide.

This view of the character of the responsibility attaching to European Powers suggests two considerations which have a special bearing on the study made in this Survey. The present is possibly the most formative, and therefore the most critical period of African history. There are many areas in which little has been done beyond laying the foundations on which social development must be built up; the policy which is to be followed in creating the structure is now only beginning to take shape. In the second place, something more than the exhibition of a spirit of humanity or the sympathetic application of the routine of administration is needed for the adequate discharge of a responsibility of this character. The needs of Africa extend beyond the maintenance of order, the institution of courts of justice, or the prevention of oppressive action by native authorities or European employers of labour. It would not be correct to say that these, and similar elementary requirements of a civilized rule, are everywhere fully met; but it is possible to feel with some confidence that the improvement of the standards of administration, which has been a marked feature of recent years, will be progressively maintained in the future. The special needs of Africa at this stage are for a more comprehensive study of the factors which determine the nature of its social development, and a more scientific approach to the problems of health and material well-being to which its physical characteristics have given rise. The studies required for the solution of such problems as these can offer an unusual interest to those who undertake them. A considerable part of the activity of the intellectual world is expended to-day in the study of social institutions, systems of law, and political developments which can now only be examined in retrospect. But Africa presents itself as a living laboratory, in which the reward of study

may prove to be not merely the satisfaction of an intellectual impulse, but an effective addition to the welfare of a people.

A scientific approach to the questions of African development demands the study of problems of a social nature equally with those involving the application of the physical sciences. But all problems alike have one significant characteristic. No one question can be studied in isolation; there is a close interdependence among all the essential problems of Africa. It is unnecessary to dwell here on a fact of which every chapter of the Survey will furnish ample illustration.¹ But it follows that research into the problems of African development must always have something of the character of a co-operative undertaking.

An observer of British colonial administration, in addressing a British audience, has an advantage which is not always shared by inquirers from other countries. There is in Great Britain a large public whose serious interest in colonial affairs is based on some degree of knowledge, and sometimes indeed on an actual experience of their problems. It is not out of place to refer here, as a proof of the seriousness of this interest, to certain discussions which took place after the bulk of this volume was in print. The disturbances which occurred in some of the West Indian colonies, arising out of the conditions in which native labour is employed, gave occasion for some public discussion regarding the adequacy of the organization of the Colonial Office for the direction of colonial policy in modern conditions. It was realized that the Secretary of State has of late years had the assistance of a number of very competent advisory bodies, dealing with technical and scientific branches of administration.² But it was suggested that there is little evidence of a central direction of major lines of policy, of which the need is especially felt when colonial administrations are passing out of the stage at which their main occupation lies in the establishment of order or the provision of the more elementary social services. Some who joined in the

¹ See, for example, Chap. XXIV, pp. 1612, 1624.

² See Chap. VI, p. 161; Chap. XXIV, pp. 1626-7.

discussion suggested the institution of a Colonial Council, of the nature of the Council of the Secretary of State for India. Others considered that there was a lack of contact between the home authorities and the local administrations, which could best be remedied by the formal appointment of an inspectorate on the French model.¹ There were finally those who insisted that, in their phrase, the Colonial Empire could not be governed from Downing Street, and saw the balance of advantage in a maintenance of the tradition which gives to the heads of local administrations as wide a discretion as possible in the shaping of policy.

The 'Council of India' had an unusual position.² When India was transferred to the Crown in 1858 the actual experience of Indian affairs lay with the Court of Directors of the East India Company and its servants, for the Parliamentary Board of Control established in 1784 had little direct contact with Indian matters. In creating the Council, the Act of 1858 proposed partly to make that experience available to the Secretary of State (seven of the fifteen members of the first Council being elected by the Court of Directors), and partly to preserve in the management of Indian affairs an element which would be independent of political considerations. The Council was charged with the conduct of all Indian business transacted in the United Kingdom; the Secretary of State presided and, save in one respect, could overrule it. But the exception was important. All proposals for expenditure from Indian revenues required the concurrence of a majority of the Council. There were at the time those who viewed with apprehension the extent of the powers which were being given to the Secretary of State, and this provision secured that in one important range of matters neither he nor the British Government itself could overrule a majority of the Council. Up to the passing of the India Act of 1935, which replaced the Council by a body of Advisers to the India Office, it retained its powers over the sanction to be accorded to expenditure from Indian revenues. But in other respects its position underwent a gradual change. As the Council had no statutory responsibility for general policy, it was

¹ See Chap. VI, p. 188.

² For its history see *The Cambridge History of India*, vol. v, 1932, chap. xi; also *Report of Joint Committee on Indian Constitutional Reform, 1933-4*, p. 225.

not necessarily consulted on it, and the influence which it exercised varied greatly from time to time with the personality of the Secretary of State.

The circumstances in which the proposed Colonial Council would operate differ widely from those which prompted the creation of the Council of India. It is indeed open to doubt whether the advice obtainable from a Colonial Council would have greater value than that which, in modern conditions, is readily available to the Secretary of State from the heads of colonial administrations or from the advisory bodies appointed by him. The situation would appear rather to need the provision of means by which colonial affairs can come under the systematic review of a body of informed non-official opinion. The Belgian *Conseil Colonial* occurs as a precedent, but it is only partly relevant, since the *Conseil* is consulted only on legislative proposals, and on the budget of the Congo.¹ The *Conseil* is, moreover, a non-parliamentary body, and all experience, including that of the Council of India itself, shows that in Great Britain it is difficult to allow to a non-parliamentary body any formal right to deal with policy for which a Secretary of State is ultimately responsible to Parliament. On this view, the only body competent to fulfil the function indicated appears to be a Standing Committee of the Houses of Parliament, specifically charged to report periodically on the affairs of each colony or protectorate, on the basis of the official reports or any other public material brought to the Committee's notice. Such a body might also, following the procedure of the Permanent Mandates Commission,² examine representatives nominated by the Colonial Office to appear before it in order to explain matters arising out of the reports.

It is true that there is no exact precedent for a committee of this character. In the eighteenth century the inquests conducted by select committees of the Commons before every renewal of the East India Company's charter had an acknowledged place in the development of British policy in India.³ These inquests ceased after 1858, but a function of similar importance was performed by

¹ See Chap. VI, p. 207.

² *Ibid.*, p. 218.

³ See the 'Montagu-Chelmsford' Report on Indian Constitutional Reform, Cd. 9109, p. 30.

the Joint Committees which examined the projects for Indian reform in 1919 and again in 1933-4. All such committees were, however, specially appointed for the purpose, and were not of the nature of standing committees. The Standing Joint Committee on Indian affairs, appointed as the result of the legislation of 1919,¹ had at first somewhat wide terms of reference. It was not to confine itself to matters referred to it by the Secretary of State or Parliament, but was to consider and report on matters brought to its notice by its chairman or members. This body affords, perhaps, the nearest analogy to the suggested standing committee on colonial matters, though it was not charged with making the periodic review which would form part of the functions of the latter body. Its terms of reference were, however, found to be an embarrassment, and in 1924 the Committee was charged to consider only the matters referred to it by Parliament or the Secretary of State. It made a number of such reports during the early years of its existence, but it ceased to function actively after 1925; it was not reappointed after 1928. So far, therefore, as the Committee constituted a precedent, its experience seems to point clearly to one conclusion. A Standing Colonial Committee would be of little value, unless Parliament specifically charged it with the duty to report at stated intervals on the affairs of each colony, on the basis of material which it would be the formal duty of the Colonial Office to present to it.

¹ See the 'Montagu-Chelmsford' Report on Indian Constitutional Reform, Cd. 9109, p. 236.

CHAPTER I

THE PHYSICAL BACKGROUND

I. GENERAL DESCRIPTION

THE history of every continent is written clearly in its geographical features, but of no continent is this more true than of Africa. That it should have remained the 'dark continent' until so late a period of history finds a ready explanation in its physical characteristics. The greater part of its coast-line has little safe harbourage, and its rivers afford no easy access to the interior; the larger of them are blocked by sand bars, and it is only the Congo which has an estuary of deep water. On both the east and the west, thousand-mile stretches of sand-barred, surf-beaten coast are to be found, and the high cost of artificial harbour works, such as Takoradi or Beira, reflects the difficulties which retarded the early penetration of the continent. Similarly, if we seek an explanation of the long story of tribal migration in the central, eastern, and southern areas, with its consequences in the absence of stability of settlement, and lack of any continuous history, we must again look to the physical background. Over immense areas the African soil lacks the constituents which make possible a continuous occupation for agricultural or even pastoral purposes; 'shifting cultivation'¹ is less a device of barbarism than a concession to the character of a soil which needs long periods for recovery and regeneration; and the trekking habit, whether of Dutch farmers or African tribes, has been due to the requirements of that 'extensive' system of occupation which the character of the soil has seemed to demand. Again, the feature of Africa which impresses itself most definitely on every modern observer is its relative lack of population. Figures of density of population as applied to large areas are apt to be deceptive and must be used with discretion; in making comparisons it is necessary to exclude those areas which are not suited to beneficial human occupation, nor can one profitably compare the population density² of industrialized countries with those which are mainly agricultural or pastoral. But though there

¹ See Chap. XIII, p. 878.

² See Chap. IV, pp. 104-9.

are in Africa some small blocks which are exceptionally well populated, there is nowhere any considerable area which contains a density of population in any way comparable to that of India, Indo-China, the Netherlands Indies, or many of the non-industrialized areas of Europe. The figure for the Union of South Africa generally is 20·3 per square mile; that of its most favoured native area, the Transkei,¹ is calculated at 58·1. The general figure for Southern Rhodesia is 8·6; among the predominantly native areas, Uganda has 39, Tanganyika 14·3, the Belgian Congo 12·1, Northern Nigeria 40·1, Southern Nigeria 96·9, French West Africa (excluding the lightly populated Sudan province) 8·9. The general figure for British India is 200, for Indo-China 81·5, for Java 817·5. In Europe comparable figures for predominantly agricultural countries are: France 197, Hungary 249·2, Yugoslavia 156·4. An explanation of the general low density of population has sometimes been sought in incidents such as the ravages of war or of the slave trade, and it has again been ascribed to the unusual prevalence of human and animal disease. But save for the exceptional depredations of tyrants such as Chaka, it is doubtful if there has been in Africa generally any unusual loss of life due to tribal warfare; the most destructive period of the slave trade was of relatively short duration; and a high prevalence of human and animal disease is itself the result of malnutrition associated with poverty of physical conditions.

We are driven to the conclusion that the low density of population over many parts of Africa is a symptom of a physical configuration which is unfavourable to the rapid growth of the human race; and it may be added that all experience has shown that a remedy is not to be found merely in the introduction of law and order, the spread of communications, or the routine application of existing knowledge of sanitary and agricultural science. If Africa is to be rendered capable of supporting a large settled population, with adequate standards of living, the result can only be attained by the study of the remedies applicable to her unusual needs.

The following pages of this chapter give an outline of the physical features of the area with which this Survey deals, and treat of

¹ See Chap. XII, p. 806.

certain administrative aspects of work, such as mapping or the study of meteorology, which are in varying degrees necessary to its development.

In general elevation and relief the country discussed in this volume falls into three broad sections.¹

1. The north-west, extending from the Guinea lands to the western edge of the Abyssinian plateau and south into the Congo, consists of a series of relatively small highland blocks—the Futa Jallon, the Bauchi plateau, and the Cameroons—interposed between wide basins. The middle Niger basin in the region of the great bend was formerly an area of inland drainage, and the river, still flowing sluggishly in this section, floods into many adjacent depressions every summer. An earlier stage of the same process is found to the east, where the headwaters of the Benue are slowly cutting back the low divide separating them from the basin in which the waters of the Shari system still empty into the enormous swamp of Chad. A third basin to the east has a northern outlet by which the waters of the Bahr-el-Ghazal and the Sobat, passing through vast swamps, emerge to the Nile. To the south lies the Congo basin, formerly the floor of an elevated lake, in which extensive summer flooding is found. Its main rivers swing round in a curve before they converge to enter the gorge and rapids which render the Congo unnavigable for 150 miles.

2. The eastern highland area, in which great massifs at general elevations of over 5,000 feet are found, presents the most extensive example of recent earth movements, resulting in broad uplifts with linear fractures along which volcanic extrusion has thrown up a series of eruptive cones. This area is characterized by large blocks of highland and giant cracks of the rift valley system which extends at varying elevations from the Jordan valley and the Red Sea to the Shire river.²

South of the Abyssinian highland, and separated by a low but arid belt, is the highland of the Great Lakes. Its flanks are traversed by the two limbs of the rift system which contains a string of lakes and converges on Lake Nyasa in the south. In the heart

¹ For general geography of Africa see W. Fitzgerald, *Africa: a Social, Economic and Political Geography of its Major Regions*, 1934.

² J. W. Gregory, *The Rift Valleys and Geology of East Africa*, 1921.

of this area is the Victoria Nyanza, the first reservoir of Nile waters. The highlands are sufficiently lofty (average elevations are over 6,000 feet) to mitigate the climatic effects of equatorial latitude, and the more accessible eastern area in central Kenya and Tanganyika has been the scene of the only considerable white settlement in equatorial Africa.

3. The southern lobe of Africa is a broad high central basin (Barotseland and Bechuanaland) occupied by the Zambesi and Limpopo river systems. At its corners lie four high plateaux, those of Angola, Southern Rhodesia, South West Africa, and South Africa. The last, lying almost entirely south of the Tropic, rises steeply from a narrow coastal plain to culminate in the escarpment of the Drakensberg and the highlands of Basutoland. Across its westward sloping surface, the high veld of the Transvaal and Orange Free State, the Vaal and Orange river system carries the waters of the east through the Kalahari desert to the Atlantic Ocean.

II. SURVEY AND MAPPING

(a) *General Problems*

The extent of our knowledge of the topography of these areas is explained in chapter II of *Science in Africa* issued in association with this Report. It may be said that, with few exceptions, the governments with which we are concerned have adequate topographical material for the more elementary purposes of administration, but there is great inequality in the extent to which they are provided with the material needed for the application of those services which are the increasing occupation of more advanced types of government. Administrations as poor as many of those in Africa may well be excused for considering the expenditure on these services from the point of view of minimum rather than of maximum standards; and there has been in some areas a tendency to postpone survey and mapping in favour of other work calculated to produce more immediate tangible results, or to confine detailed survey to mineral areas, or lands set apart for European settlement. It is obvious, however, that accurate mapping is an indispensable basis not merely for work aiming at material improvement, such as forestry and agriculture, but for

the handling of many social problems, such as those connected with health or the requirements of a land policy suited to the conditions of native Africa. It is indeed possible to quote more than one instance where the lack of topographical knowledge has been attended with serious results; thus a bridge appears to have been built in Northern Rhodesia eleven miles from its correct site, owing to the use of an out-of-date map, and the railway from Sekondi to Kumasi, constructed without an adequate survey, had to be realigned at a cost approaching £2,000,000. It was estimated in 1921 that the lack of accurate topographic maps involved the South African farming community in unnecessary expense, on farm surveys alone, of £50,000 a year.¹

(b) Organization

Looking to the present requirements of the territories with which this Report is concerned, a point of first importance seems to be the need for a more definite co-ordination of survey work in certain of the British dependencies. In these territories the survey departments are supported and controlled by individual governments; their duties cover geodetic, topographical, and cadastral survey, and town planning. A Colonial Office Survey Committee advises on the correlation of work; but it is true to say that the progress and character of the survey depend mainly on local resources and initiative. Some measure of intercolonial organization would seem necessary if the geodetic and topographic surveys of the British dependencies are to be planned and carried out on economic and efficient lines. Suggestions have indeed been put forward for an Imperial Geodetic Department on the lines of the Hydrographic Department of the Admiralty.² Whatever may be the case for these proposals, it seems probable that a central department for trigonometrical survey could be established successfully for the group of territories comprising Northern Rhodesia, Nyasaland, Tanganyika, Kenya, and Uganda.³

The Union, faced with a similar problem, has established the

¹ *Report of the Survey Commission*, U.G. 39, 1921, para. ii. 5.

² See M. N. MacLeod and others in Conference of Empire Survey Officers, *Report of Proceedings*, 1935.

³ E. B. Worthington, *Science in Africa*, 1938, chap. ii.

Trigonometrical Survey for the whole country, leaving only property surveys to the Survey Departments of the four provinces, the Cape, Natal, Transvaal, and the Orange Free State.¹ The four Surveyors-General are members of a board which has advisory functions in matters of the general policy of the Trigonometrical Survey.

The French survey service in Africa is grouped in large regional units and has a central organization in the Service Géographique de l'Armée in Paris.² This organization is making consistent progress on a comprehensive plan of geodetic and topographic work. Cadastral survey is carried out only in large urban areas. Under the Belgian system the direction of field work comes from an office at the Ministère des Colonies in Brussels. It seems that this centralization has resulted in stress being laid on major triangulation and the publication of topographic maps. A department for geographical and scientific investigation was recently inaugurated in the Ministry of Colonies at Lisbon, so that a centre now exists for the co-ordination of local survey establishments.

The view has been widely held that surveys should rank equally in importance with other heavy development work which is normally executed from loan funds. At the Conference of Empire Survey Officers in London in 1931 a resolution was passed that 'consideration should be given to the employment of loan funds for the immediate provision of an adequate and permanent controlling framework in all Colonies where such does not already exist, or is incomplete'. This resolution received the approval of the Colonial Office. If loan funds are used, however, expenditure requires to be evenly distributed over a term of years, for survey work depends upon trained personnel with experience of local conditions; qualified staff cannot be assembled at short notice, nor disbanded without wasting valuable knowledge.

(c) *Geodetic Survey*

A further point of importance, and one affecting all the territories concerned, is the nature of the measures to be taken for the provision of an adequate geodetic framework for the mapping of

¹ Union of South Africa Land Survey Act, 1927.

² E. de Martonne, *Cartographie coloniale*, 1935.

the continent as a whole. This is an essential condition if the survey work of each country is to go forward without loss of speed and accuracy. Eventually it will be necessary to survey geodetically two or three meridional chains and at least as many parallels of latitude, cutting across all international boundaries. The work which demands the most urgent attention, however, is the completion of the arc of the 30th meridian, which extends across Africa from Alexandria to the coast near the boundary between Cape Province and Natal. The section from Cape Province to the Zambesi was completed at the beginning of the century under Sir David Gill. The triangulation was continued and, deviating slightly to the east of longitude 30° , reached the northern boundary of Northern Rhodesia in 1907. As far as Kigoma the work was carried out by a Royal Engineer team under Major Hotine in 1931-3. The Tanganyika Survey Department then continued the triangulation northward, deviating to the east where the arc passes through Belgian mandated territory, and linked up with the Uganda system. The computations following this latter operation are not yet finished, and some field work is outstanding, but these matters are in hand. From about 1° of north latitude there is a large gap comprising a small piece of Northern Uganda and the whole of the Sudan as far as the Egyptian border. The Egyptian sector was completed in 1930. The Anglo-Egyptian Sudan is at present engaged on the northern portion of the arc, adjoining Egypt. The filling of these gaps should not present serious difficulties of terrain except where the line cuts through the Sudd area of the Sudan, which is impossible country for triangulation. Deviation will therefore be necessary. A complete circuit round both sides of the Sudd is regarded as the best method, but valuable results could be achieved by deviating to the east along the Abyssinian-Sudan frontier, and thus incidentally providing a geodetic basis for fixing this boundary.

The provision of an adequate and controlling geodetic framework has been more consistently pursued by the French and Belgians than by the British. This seems to have been due largely to the preoccupation of the British with cadastral survey, needed for urgent development projects. For this purpose personnel has too often been withdrawn from unfinished triangulations. It may

be noted that African conditions emphasize the special need for upkeep. The need for annual maintenance applies not only to property surveys, but to geodetic and topographic work. The topographic survey of the Orange Free State, though excellently carried out, had to be done again after only fifteen years because no provision had been made for the maintenance of beacons or for keeping the maps up to date.

(d) Cadastral and Topographical Survey

The extent of detailed cadastral and topographical survey has varied in accordance with the policy observed in regard to land or mineral development. Thus the pursuance of a policy of European settlement in the Union of South Africa, Southern Rhodesia, and Kenya has attached particular importance to a cadastral survey; the grant of quasi-freehold on the Mailo lands has necessitated a large measure of detailed survey over a considerable part of Uganda;¹ the Union Minière du Haut-Katanga has led to the execution of one of the most complete topographical surveys of large areas as yet effected in Africa. There will be found in Chapter XII some considerations as to the extent to which future developments of land policy may necessitate a cadastral survey in predominantly native territories. At the moment, it may be said that the chief requirement in regard to the cadastral surveys hitherto effected is the linking up of independent surveys with some common system of triangulation. It may be added that the need for accurate cadastral work is perhaps more necessary in Africa than in developed countries where hedges, dykes, and many prominent landmarks help the surveyor, and where streams are held permanently to one course by artificial means. In Africa, where landmarks may be few, where streams may carve out new gullies for themselves, where tracks constantly change their alignment, a high degree of accuracy is required from the property surveyor.

(e) Methods of Projection

Various systems of projection have been used for mapping in Africa, and in some cases local projections have been worked

¹ See Chap. XII, p. 851.

out to suit special needs. As, however, the triangulations of the different territories begin to interlock, and as property surveys come into a rigid framework, it is desirable to have an agreed system of projection for the continent as a whole; otherwise a vast amount of redrawing of maps will be necessary, and inconvenience will be caused when the maps of adjoining territories have to be used in conjunction. After the Conference of Empire Survey Officers in 1931 and again in 1935, Brigadier MacLeod put forward a method for projection of the 1 : 250,000 map series, whereby the whole of Africa is divided into meridional belts each representing six degrees of longitude. Commandant Maury, the survey expert of the Ministère des Colonies in Brussels, has already used a somewhat similar scheme for projection by dividing part of the Belgian Congo into meridional belts. If a unified system were to be adopted in the near future, enormous expense would be saved.

It is a serious handicap to the co-ordination of surveys in Africa that British measurements are in feet, while all other authorities use the metre. There are strong reasons for the view that it would be in the interest of the British territories themselves to adopt a unit of length which is not only scientific but also international.¹

The need for expanding survey work has stimulated the employment of Africans for surveying. In the Gold Coast the Government employs 45 African surveyors who do all the field work, with the exception of the main triangulation and the observation of astro-radio points; they were trained in a survey course of three years organized by the Department. A large number of men trained at this school sat for the Licensed Surveyors' Examination,² and now undertake individual property work for mining concessions and other private clients. In the Nigerian Department there are 43 African surveyors, 40 draftsmen, and 7 lithographers. It is a noteworthy fact that Kano, one of the Native Administrations in Nigeria, has its own Survey Department. In British East Africa there was a training course for African plane-tableers at Makerere College in Uganda, but at present the only survey course is that recently opened by the Tanganyika Depart-

¹ M. N. MacLeod, 'Co-ordination of African Surveys', Conference of Empire Survey Officers, *Report of Proceedings*, 1935, pp. 142, 143.

² E. B. Worthington, *op. cit.*, chap. ii.

ment. This school receives support from the Zanzibar Government, which sends boys to Tanganyika to be trained.¹ Under the French organization most of the work of drawing, computing, and printing is carried out by African subordinate staff.

(f) *Air Survey*

The development of air survey has led to suggestions that the persistence in older methods may be an expensive anachronism. The subject is under constant review by the British Air Survey Committee, which includes representatives of the various interested Government Departments. Experience in Africa seems to show that in certain cases the aerial photograph has definite advantages, especially in precipitous country or on broken land covered with vegetation. A particular case of the latter is swamp land; for instance, the Sudd area of the Sudan, which presents insuperable obstacles to ground survey, has been efficiently surveyed from the air by a commercial company on behalf of the Egyptian Government in connexion with the project for deviating the waters of the Bahr-el-Jebel.

Photographs taken from the air have uses besides that of map-making, for trained examiners can detect in them much which is of value in connexion with the alignment of communications, afforestation,² the appreciation of the nature of soils and vegetation, of the proportion of land under cultivation, or many of the details required in tsetse control work.³ Much of the information which can be ascertained in this way is unobtainable by any other means.

At the same time it is clear that air survey, in spite of technical developments, is not likely in the future to be able to replace triangulation, and a certain measure of ground control will always be necessary to obtain fixed points. Again, contours plotted from air photographs cannot compete in accuracy with ground work.

The cartographical stages of aerial survey are slow, for distortions caused by tilt or by inequalities in the height of the land have to be corrected by long processes. Since the cost of draftsmen able to make maps from air photographs may be as high as, or higher

¹ *Report of the Commission on Higher Education in East Africa*, Colonial no. 142, 1937, p. 109.

² See Chap. XIV, p. 1011.

³ M. Hotine, *Surveying from Air Photographs*, 1931; Air Survey Committee, *Second Report*, 1935.

than, that of plane-tablers who work in the field, claims on behalf of air survey for greater speed or lower cost should be put forward with caution; the decision must in each case rest on consideration of the type of country to be surveyed, and the nature of the results required. At present the facilities for air survey in the British territories in Africa consist of those provided by a number of commercial firms and of the air survey section maintained by the Government of Tanganyika since 1931. The companies have done useful work both for governments and for mining interests,¹ but where they have worked on private charter the results have in some instances unfortunately not been available to the governments for some years. The Tanganyika Government's air survey section has made surveys of all the townships in the territory, and carried out a survey for the Government of Zanzibar in 1934 for town planning and cadastral purposes.² In French West Africa considerable areas have been surveyed from the air with success. The Compagnie Aérienne Française carried out a survey of the lower Belgian Congo, and a small corner of Katanga has also been surveyed from the air.

III. CLIMATE AND VEGETATION

A continent which stretches for 5,000 miles from the Mediterranean southwards across the Equator to 35 degrees south, and for 4,500 miles from Dakar in the west to Guardafui in the east, naturally exhibits a wide variety in climate and in vegetation. But the great mass of Africa lies in the tropics; it is only in the north-western and southern extremities and in a few areas of high altitude that temperate climates exist. It may be possible to ski close to the line of the equator on the slopes of Mt. Kenya, or to find a perfect winter climate in South Africa; but, taken as a whole, Africa is the most tropical of the continents, and it is only a relatively small area which offers conditions comparable to those of Europe, or has proved suitable for European settlement.

In equatorial latitudes the sun, which is vertically overhead at midday twice a year and never declines more than 25° from the

¹ H. Hemming, 'Aircraft in relation to Petroleum Technology: Use for Survey and Transport', *Journal of the Royal Aeronautical Society*, 1934, no. 37, p. 274, and 'The Use of Air Photography for Surveying and Economic Development', *Photographic Journal*, 1934, no. 74.

² Tanganyika Territory, Survey Department, *Annual Report*, 1934.

zenith, maintains a high temperature with only small variations throughout the year. The movements in the heated surface layers of the atmosphere bring rain at all seasons, but this tends to be greatest in the periods immediately following the equinoctial maxima of insolation. In such areas with an annual rainfall of over 60 inches per annum and no period of real drought, evergreen forest of dense undergrowth is developed.

On either side of the equatorial zone are belts six or seven hundred miles wide in which highest temperature and precipitation occur once a year in the summer season. But while summer temperatures higher than those of equatorial latitudes are experienced as far as the tropics of Cancer and Capricorn, the amount of the summer rainfall diminishes rapidly with increasing distance from the equator, and the duration of the wet season shrinks from eight or nine to less than three months. The savannah vegetation of these belts thus grades from luxuriant tropical grassland studded with trees and threaded by forested river valleys to acacia scrublands with an incomplete cover of wiry grass. Beyond these lie the bare surfaces of rock, gravel, and sand in the true desert areas of the country extending for 10° on either side of the northern and southern tropics, where drought has spread over the entire year.

The Sahara becomes an area of low atmospheric pressure under the heat of the northern summer. Streams of humid air from the Gulf of Guinea are in consequence drawn across the equator at this season as rain-bearing south-west winds, which extend the limits of heavy rainfall and dense forest to the West African coast. Where the monsoonal air stream meets the highland areas rainfall is heavier than at the equator, and the highest annual precipitations in Africa occur on the seaward slopes of the Futa Jallon plateau in Sierra Leone and Liberia and of the Cameroon highlands at the eastern end of the Gulf. Freetown has a mean annual rainfall of 174 inches, though averages for stations near the equator in the Congo basin do not exceed 65 inches. The mean annual fall on the western face of Cameroon mountain probably reaches 400 inches and 577 inches were recorded in 1919.¹

On the north-eastern side of the continent, owing to the absence

¹ E. B. Worthington, *op. cit.*, chap. iv.

of a normal trade wind climate, desert conditions extend to the coast. The rainfall in equatorial latitudes in the east is also reduced, probably on account of water vapour drawn off by the atmospheric circulation set up in the Indian Ocean by the summer low pressures of south-western Asia. A desert tongue extends south through the Horn of Africa and along the coast as far as the equator itself, while the highlands of East Africa have a moderate precipitation of 25 to 50 inches, which is generally insufficient for the development of dense forest.¹

From about 15° S., the trade winds of the south Indian Ocean, reinforced in summer by the low pressures of the interior, give a prolonged season of summer rain to the eastern coastlands; but the strong relief barrier of the plateau margins in this part of Africa confine heavy precipitation (over 40 inches) and the development of forest to the coast. Severe aridity is restricted to the far west, however, and desert conditions, which in Northern Africa extend from east to west, are in the south confined to a strip on the western coast.

In South Africa the plateau in the lee of the Drakensberg escarpment is sufficiently protected to have become an extra-tropical extension of the high veld. Rainfall diminishes westwards to less than 10 inches in the scrublands of Namaqualand. Woodland is encountered only in the south-western margins of Cape Province which come within the westerly cyclonic belt in the southern winter and have a climate of Mediterranean type.² A crescent of grasslands thus flanks the rain forests of Africa and extends southwards to within a few miles of the southern coasts. This has been of great significance in the occupation of the African continent, for the two wings running west through the Sudan and south through the eastern and south-eastern plateaux have been the main avenues of human migration.³

There is some evidence that mean annual temperatures in tropical Africa tend to vary in relation to the eleven-year sunspot cycle by about 1° F. from sunspot maximum to sunspot minimum. It is also claimed that evaporation is substantially greater at sunspot

¹ C. E. P. Brooks, 'The Distribution of Rainfall over Uganda, with a note on Kenya Colony', *Journal of the Royal Meteorological Society*, 1924, no. 50.

² F. E. Plummer, *Aspects of Rainfall in Western Cape Province: a Basis for Geographical and Agricultural Study*, 1932.

³ A. de Préville, *Les Sociétés africaines*, 1894.

minimum. According to some authorities, the sunspot cycle is felt with particular intensity in the East African region, where its influence on the rate of evaporation is reflected in the rise and fall of the levels of the great lakes. The highest levels have been recorded at intervals of eleven years coinciding with sunspot maxima.¹ The connexion between lake levels and sunspots cannot, however, yet be regarded as established.²

The possibility that variations in rainfall might correspond with the sunspot cycle has also been considered. The fifty-year record at Dakar shows a striking correspondence,³ but this appears to be the only case on record. It has been suggested that the sunspot cycle influences plant growth and is also reflected in numerous human problems; there is, for example, some evidence also that the great outbreaks of locusts have followed the same cycle. On none of these points, however, is there material which would allow any definite conclusion to be drawn.

Equal doubt surrounds the theory, to which some prominence has been given of late years, that there is a cyclical change of climate now in progress in Africa. It is clear that during early pluvial phases the Sahara and parts of Eastern Africa that are now arid were generally humid, fertile, and populous; and it has been claimed that there is to-day a period of growing desiccation throughout large areas in Africa. There is in particular some evidence that the Sahara is making advances along its southern border. The evidence on this latter point is not yet accepted as conclusive: and it is also possible that the Sahara constitutes a special case, which has to be considered separately from theories relating to the general growth of desiccation. It may be said that most exponents of the theory of desiccation ascribe it to changes in the drainage rather than to climate; that is to say, that as a result of headward erosion reservoirs of water which have been held on the continent by the encircling rim of hills are being increasingly tapped by the head waters of streams which find their way through those hills to the sea. The destruction of forests and other vegetational cover by human agency has undoubtedly promoted local

¹ C. E. P. Brooks, 'Variations in the Levels of the Central African Lakes Victoria and Albert', 1923, *Geophysical Memoranda*, 2, 20.

² E. B. Worthington, *op. cit.*, chap. iv.

³ L. Welter, 'La pluie à Dakar et l'activité solaire', *Bulletin commercial de l'A.O.F.*, 1931.

desiccation in large areas, but careful examination of long rainfall records fails to reveal any significant evidence to support the view that mean annual rainfall in any considerable part of Africa is diminishing.

IV. CLIMATOLOGY AND METEOROLOGY

The need by air communications of accurate information regarding weather conditions has prompted a great extension of meteorological work in Africa. As regards the South African region, there is a radio exchange of synoptic reports between the Union of South Africa, Southern Rhodesia, Northern Rhodesia, Moçambique, and Madagascar. The meteorological service of South-West Africa is not centralized under the Union organization, although the meteorological office of the Irrigation Department at Pretoria collects and publishes data from the High Commission territories.¹ The provision of information for aviation² in South-West Africa and Angola appears to be inadequate, but Moçambique has a meteorological service which is in some respects a model.

The meteorological service of British East Africa was established in 1929. It covers Kenya, Uganda, Tanganyika, Zanzibar, and Northern Rhodesia, and is supported by these governments, together with Egypt and the Sudan, which are interested in the rainfall of East Africa. Nyasaland is not within the scheme. Although the East African service is co-ordinated with its neighbours north and south, there appears to be a need for a better system of wireless communication with the Congo.³

A meteorological service was established for the Belgian Congo in 1911 under the Institut Royal Colonial Belge, but it appears that the organization is deficient in its wireless communication, particularly in regard to collaboration with the French to the north-west and with the British to the east.⁴

Nigeria has a service organized by the Surveyor-General, and the extension of Imperial Airways to Kano in 1935 revealed new needs which have been met by reorganization and the opening of new stations. In the Gold Coast the Agriculture Department is

¹ Basutoland, Bechuanaland, and Swaziland.

² E. B. Worthington, *op. cit.*, chap. i.

³ *Ibid.*

⁴ *Ibid.*

responsible for recording rainfall, and some of its observation stations collect data regarding temperature, pressure, humidity, and winds, but to meet the needs of aviation two stations have recently been established under the Survey Department. The division of meteorology into two sections administered by different departments seems somewhat unsatisfactory, but it is expected that with the further development of airways it will be necessary to establish a unified meteorological service in all the British territories of West Africa.¹ British West Africa as a whole is one of the few quarters of the habitable globe where data regarding pressure systems are not available, though this state of affairs is being remedied by the new stations. Comparatively few of the existing stations are in the parts of the northern territories where data on rainfall are most needed.

French West and Equatorial Africa and the French Cameroons have a meteorological organization which was laid down by decree in April 1929. The service in West Africa was established in 1931, and that in Equatorial Africa in 1935. Portuguese Guinea and Liberia have no regular meteorological service.

Only a start has been made in the collection of meteorological data in Africa and in the establishment of uniform international methods of recording them. It is difficult to secure co-ordination of methods when the collection of data is entrusted in different territories to authorities whose point of view varies considerably. It is interesting to note that in 1936 there met at Lusaka for the first time Regional Commission No. 1 of the Office Météorologique International; the holding of such meetings should be of great assistance in achieving uniformity and rapid exchange of data.

Apart from the collection of purely meteorological data, there are some points within the field of climatology in which research is likely to yield valuable results. From the point of view of plants and insects, the important climatic factor is not the mean average over wide areas, but conditions in a particular cubic metre of atmosphere overlying the soil. This is known as the eco-climate. Since it has been shown that the temperature of the outer leaves of a coffee bush may in some cases be as much as 7° C. below the

¹ E. B. Worthington, *op. cit.*, chap. i.

minimum recorded on the meteorological screen,¹ it will be realized that the study of eco-climates is of great importance. Moreover, changes in climate from hour to hour and day to day may be of as much importance to plants and insects as seasonal changes. In relation to tsetse fly and other insect pests, this study promises useful results.

Another field for research of special importance in Africa is that of evaporation rates; it is of limited value to know how much water comes down if it is not possible to set against this the quantity of water that goes up. Scientists have, however, not yet reached agreement on a satisfactory uniform system of recording evaporation.²

As regards the effect of climate on health, there are factors about which little is known and on which further research is needed.³ Light and direct radiation are elements of climate which may be as important for health as heat, humidity, and wind, but the knowledge of radiations, especially in the tropics, is scanty. For instance, it is not yet possible to say what kind of radiation is responsible for tropical sunstroke.⁴ Experiments with air-conditioned rooms, which are yet in their early stages, may possibly have an important bearing on the health of Europeans in Africa.

¹ T. W. Kirkpatrick, 'The Climate and Eco-climates of Coffee Plantations', *Studies on the Ecology of Coffee Plantations in East Africa*, 1935.

² E. B. Worthington, op. cit., chap. iv.

³ J. H. Wellington, 'Some Geographical Aspects of the Peopling of Africa': Presidential address to Section B of the South African Association for the Advancement of Science, July 1937, *South African Journal of Science*, vol. xxxiv, Nov. 1937.

⁴ E. B. Worthington, op. cit., chap. iv.

CHAPTER I

THE AFRICAN PEOPLES

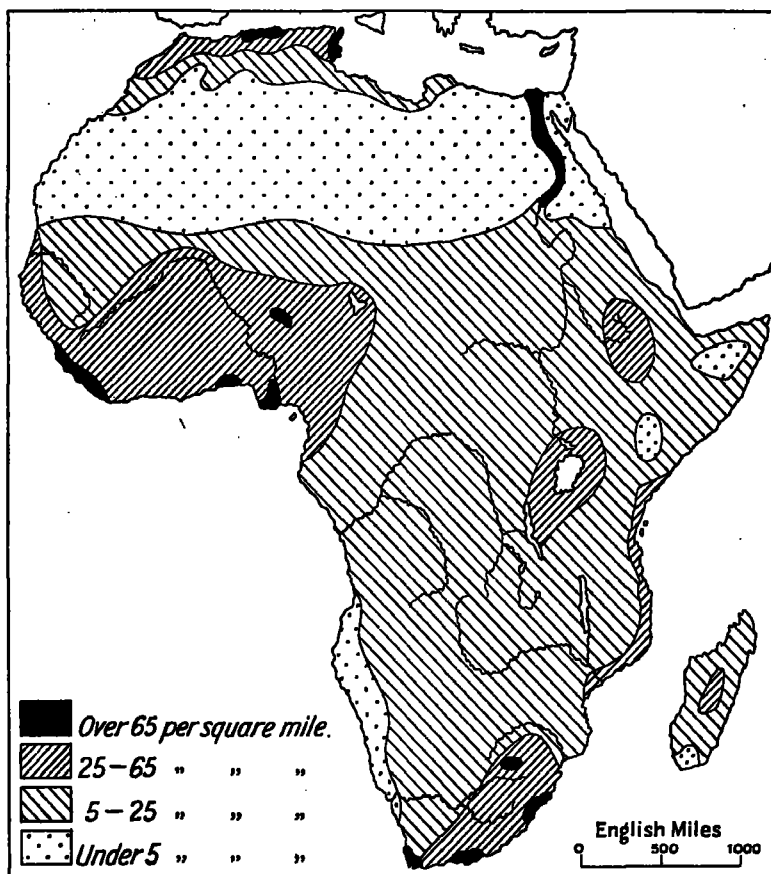
I. GENERAL DESCRIPTION

THE peoples of Africa are believed to have been derived from three principal stocks—Bushman, Negro, and Hamite.¹ With each of these stocks a characteristic physical type is commonly associated; but there are few parts of the continent in which adequate surveys of the physical characters of the inhabitants have been made, and it is therefore impossible to classify the different tribes accurately on such a basis. Thus it is inevitable that language and culture traits should be used as a basis for ethnic classification, however unsatisfactory this may be from a scientific point of view; it is noteworthy that the term Bantu, used to describe one of the largest groups of African peoples, has a purely linguistic significance. It is, of course, true that there is some correlation between physical type, language, and social form, and that it is possible to speak of a typical Negro language, or of a custom commonly associated with Hamitic peoples; but centuries of migration, intermarriage, conquest, and the intrusion of foreign elements have prevented much isolation of fixed types, and except for less accessible regions, such as parts of Abyssinia, the Kalahari, or the Nile swamps, the geographical features of Africa have facilitated the fusion of different racial stocks rather than their segregation.

Of the three principal stocks, the Bushmen are unique in possessing a distinct physical type, language, and culture.² They are short, though not pygmies. The skin is yellowish brown, and the hair appears to grow in patches and is rolled into small tangles giving the so-called 'peppercorn' appearance. The head is low in the crown, the face and nose flat, the cheek-bones prominent, the forehead bulging, the eyes narrow and slightly oblique. The Bushmen, who appear formerly to have occupied a great part of

¹ C. G. Seligman, *Races of Africa*, 1930, p. 19.

² I. Schapera, *The Khoisan Peoples of South Africa: Bushmen and Hottentots*, 1930; and C. G. Seligman, *op. cit.*, p. 25.



DENSITY OF POPULATION

Based on a map in Mr. Walter Fitzgerald's AFRICA by kind permission of Messrs. Methuen

Africa, now, however, number only about 7,500 and are confined to the Kalahari desert and parts of South-West Africa. Reckoned among the most primitive of African peoples, they are possibly allied to the pygmies of the Congo, French Equatorial Africa, and Kenya.¹ They live in small bands by hunting and gathering roots, but have no clan organization. They are famous for their wall-paintings, which were executed on rocks at a time when the race was more widely distributed than at present, and are in many cases of high artistic merit. Their language is characterized by the well-known Bushman 'clicks', adopted by a number of other South African peoples.

The Hottentots² are generally supposed to represent a mixture of stocks in which the Bushman and Hamite elements predominate. They also are now numerically unimportant and are confined for the most part to South-West Africa north of the Orange river. They are pastoralists owning long-horned cattle and fat-tailed sheep; they have a particular form of clan organization and follow a cult of sacred fire, which is believed to be a Hamitic trait.

The Negro type³ is characterized by the dark brown skin popularly called black, woolly hair, a taller stature than the Bushmen, a fairly long head, a flat broad nose, thick lips, often everted, and prognathous jaws. The Bantu and Nilotic tribes owe many of their physical characteristics to Negro ancestors, and have, indeed, been described as 'Bantu Negroes' and 'Nilotic Negroes'; but the peoples with which this type is associated in its purer form inhabit West Africa roughly from the mouth of the Senegal river to the eastern frontier of Nigeria. Their languages constitute a distinct group. They are mainly agriculturalists and among African peoples they have achieved the highest development of arts and crafts.

The Hamitic stock has three main branches—the Western, which includes the Berbers and the Tuaregs; the Northern, which is represented by the Copts; and the Eastern branch, which includes the Hamitic peoples in the area with which we are concerned.

¹ P. Schebesta, *Bambuti*, 1932; *Der Urwald ruft wieder*, 1935; R. P. Trilles, *Pygmées de la forêt équatoriale*, 1932.

² C. G. Seligman, op. cit., p. 33.

³ A. C. Haddon, *The Races of Man and Their Distribution*, 1924.

The typical Eastern Hamite¹ has thick but not everted lips; he may have fuzzy, wavy, or almost straight hair; his fine nose, often of European shape, differentiates him from the Negro. Among the peoples classed as Eastern Hamites the skin colour varies widely, but is generally brown. The Eastern Hamites are typical pastoral people, with the long-horned cattle depicted in ancient Egyptian paintings; the sacred fire cult is general among them, and they frequently have a religious attitude to cattle and the handling of milk. Their political organization centres around the patrilineal clan, and is associated with boys' initiation ceremonies and circumcision. Most of the available evidence, archaeological and anthropological, indicates that successive waves of Hamites have invaded Africa from a cradle-land² in the vicinity of southern Arabia or the Horn of Africa; and the present distribution of Bushman, Negro, and Hamite characteristics, whether separately or in combination, has been attributed to the effect of these invasions. Hamitic features are strongly represented in Somaliland and Abyssinia. West and south of this region, in conformity with the theory that the migration spread fan-wise from this centre, Hamitic characteristics partially modified by Negro features are found. These tribes have been classified as 'Half-Hamites'³ and 'Nilotes',⁴ though the terms have not gained general acceptance. Spreading fan-wise still farther south and west are the Bantu, a group of tribes of predominantly Negro race believed to have been modified in some regions by a greater or less admixture of Eastern Hamitic or Bushman-Hottentot blood. At the extremes of the fan, among the Negroes of West Africa and the Bushmen of the south, Hamitic traits are not present.

The Bantu, of whom there are some 40,000,000, inhabit Africa from coast to coast south of the so-called 'Bantu-line'.⁵ This boundary runs from the mouth of the Rio del Rey along the frontier of Nigeria and the Cameroons, thence eastwards across French Equatorial Africa and the Belgian Congo, south of the Uele river to the head of Lake Kiogo, south of Mount Elgon along the eastern shore of Lake Victoria, thence across Tanganyika and

¹ G. Sergi, *Antropologia della Stirpe Camitica*, 1897, quoted by C. G. Seligman, *op. cit.*, p. 97.

² C. G. Seligman, *op. cit.*, p. 98.

³ *Ibid.*, p. 157.

⁴ *Ibid.*, p. 161.

⁵ *Ibid.*, pp. 20-1.

northwards to the hinterland of Mombasa, whence a narrow enclave runs north-west to Mount Kenya. The Bantu speak languages which have common features. The nouns are divided into classes, and each class has its own grammatical agreements; grammatical changes are commonly made by adding prefixes to the root. Some form of the word *ntu* denotes 'human being': hence the name Bantu, meaning 'people'.¹ But their cultural traits are not easy to define, since they tend to combine supposedly Hamitic elements, such as a sacred attitude to cattle, a sacred fire cult, puberty ceremonies with circumcision, and iron-work, with traits found more commonly in Negro Africa, such as their political and clan organization.

Among each of the large groups—Eastern Hamites, Bantu, and West African Negroes—variety of physical type, political organization, and economic life is more striking than similarity. Thus, among the Eastern Hamites there are Masai, who have many cattle and despise vegetable foods, and Arusha, who live by hoeing and own few beasts. Among the Bantu, the Swazi are black and the Bechwana are yellowish-brown, the Waha are meagre and slight, and the Ganda are upstanding and muscular. The Negroes include the centralized monarchies of Ashanti and Dahomey, together with the Ibo, a tribe of 4,000,000 persons, who are divided between 2,000 political units owing no external allegiance.² It is, moreover, important to note that the main groups occupy areas marked by a considerable variety of climate and cultural conditions with a corresponding diversity of the habits and customs associated with such conditions. In attempting therefore in the following pages to characterize the main types of native society, it will be necessary to proceed rather by way of illustration than by detailed description.

¹ Consistency in the spelling of African names presents many practical difficulties. *Ba, Wa, &c.*, are plural prefixes denoting the people, e.g. Baganda; *Mu* or *M* are singular prefixes, e.g. Muganda. The prefix used to show language is *Lu, Si, Se, Chi, Ki, &c.*, e.g. Luganda. Expert opinion tends to omit the prefix and to aim at a more exact form of the root, e.g. Sotho rather than Suto, or than Ba-suto or Se-suto. In this Survey the policy followed is that recommended in June 1933 by the Council of the International Institute of African Languages and Cultures, which is frankly a compromise. In the chapters dealing with the African peoples and languages in their more technical aspects the latest spelling is generally used, but elsewhere forms familiar through long usage have been retained.

² M. Perham, *Native Administration in Nigeria*, 1937, pp. 222 ff.

(a) The Bantu People

The Bantu-speaking peoples represent the great majority of the native inhabitants of the Union of South Africa, the Rhodesias, Kenya, Tanganyika, and Uganda, the Belgian and the Portuguese colonies, and a part of the population of the French Congo. The various tribes appear to have reached their present homes in a series of migrations westwards and southwards which are believed to have been set in motion by the pressure of Hamite invasions. These movements were still in progress when the early settlers pushed inland from the Cape, and some tribal migrations have occurred since that date. One might instance the movement of the Ndebele and Ngoni, groups of Zulu who revolted against Chaka's leadership, from South Africa to Southern Rhodesia and Nyasaland respectively. The majority of the Bantu tribes combine agriculture with cattle-keeping; it is only those who inhabit forest or tsetse areas that have no cattle, and among the rest, attachment to their cattle is so pronounced that it is often regarded as the most characteristic element in their culture. Cattle are not only the most prized form of wealth, but are often surrounded by religious and magical beliefs and practice. In many areas it is regarded as wrong to slaughter them except on ceremonial occasions, and the value attached to cattle over all other forms of wealth presents serious problems to administrations anxious to combat the consequences of over-stocking.¹ It is of particular importance that cattle are used for the payment of the bride-price by the family of the bridegroom to that of the bride, which is necessary in most of the tribes to legalize marriage.

In agriculture the Bantu, in common with most other African peoples, practise some form of shifting cultivation.² In the majority of cases this consists simply in alternate cultivation and abandonment of the land in the neighbourhood of each village. In Nyasaland, Northern Rhodesia, and the adjoining parts of the Belgian Congo, the ground is fertilized by cutting down and burning the bush, and then remains productive for three or four years, after which the village is moved and a new area cleared. This method involves moving through a wide radius in order to give time for

¹ See Chap. XIII, p. 882, and Chap. XVI, p. 1111. ² See Chap. XIII, p. 879.

the bush to recuperate, and gives to the cultivating group itself something of a migratory character.

The type of the Bantu village varies with climatic and other conditions. The typical South African kraal is a small group of houses close together, fenced for protection against wild animals. Farther north a larger number of huts are grouped around a central open space with small cultivated plots near at hand, but the principal fields are some distance away, so that at the busy season it is necessary for families to move to temporary shelters among them. In Bechuanaland these groups are large enough to constitute considerable towns; Serowe, the capital of the Mangwate, has a population of some 25,000, some of whom have to go ten or fifteen miles to their fields. In the rich banana country near the equator the compact village gives place to a series of homesteads, each surrounded by its own banana grove. With the security brought by European rule there has been a tendency for the dispersal of compact villages.

Among some Bantu peoples, for instance the Kikuyu of Kenya and the Zaramu of Tanganyika Territory, there is no centralized political organization. The elders of the various clans exercise some authority over the members of their own group, but recognize no common allegiance to a single head. Other Bantu tribes have, however, been welded together into a close-knit unity, and in that form have exacted tribute from neighbouring peoples. This process of consolidation was still going on among many of the tribes when European administration came into contact with them. Faced with the efficient military organization of the Zulu under Chaka, the Basuto became unified under Moshesh, and to this day they take pride in their description as the Basuto nation. In Tanganyika the German administration found the Bena and Hehe organized as unified tribes; struggles for leadership were in progress among the Chaga and Nyamwezi, and were checked by the suppression of fighting between natives. In the Belgian Congo the Bushongo and Lunda formerly ruled over many other tribes, and still have highly organized systems of government.

On the north and west of Lake Victoria a series of people—the Ganda, Nkole, Toro, and Nyoro of Uganda, the eight Haya tribes of Bukoba district in Tanganyika, and the Ruanda of the

Belgian mandated area—have arisen from the conquest of Bantu agricultural people by Hamitic pastoral invaders from the north, which is believed to have occurred not more than 300 years ago. In most of these Lacustrine kingdoms, as they are called, the pastoral people—known as the Hima—still form a ruling class who do not intermarry with the agricultural serfs; in Bunyoro, however, there has been a certain amount of fusion, and in Buganda the fusion is complete.

Among the politically centralized tribes authority is sometimes in the hands of a ruling clan, the lesser chiefs being relatives or nominees of the paramount chief, as is the case in Barotseland; sometimes, as with the Chaga, the subordinate authorities are nominees of the chief selected for their loyalty. The extreme case of the latter type is probably the Buganda kingdom, where all the lesser chiefs were appointed by the Kabaka, who transferred them freely from one district to another. These peoples were not organized into fixed territorial divisions as are European or even some West African states. Population was sparse, houses easily built and destroyed, and residence in one place seldom permanent, even in the regions which do not practise the type of cultivation that involves the removal of a whole village every three or four years. In South Africa a chief or headman, when appointed, founded a kraal at the spot which he chose, and his followers attached themselves to him there. In Buganda a chief was appointed over a village in the sense of a group of persons, not of an area of territory; when he was moved elsewhere his followers, if he was popular, would go with him, so that the size of a given village, and consequently the value of the position of its chief, was subject to change.

In many Bantu tribes initiation ceremonies take place for admission to adult membership of the tribe. Sometimes, as among the Kikuyu and Kamba, a whole age-grade of boys is initiated at one time, usually with a corresponding ceremony for girls. The men's age-grade was used as the basis of military organization or of political authority, and may still be important for the latter purpose. Other tribes, such as the Tonga and the peoples of Southern Rhodesia, have initiation ceremonies without fixed age-grades. The matrilineal tribes of Northern Rhodesia and the Congo initiate

only the girls. In the case of boys, the initiation rites are often preceded by instruction in tribal duties, by tests of courage and even the teaching of poetic forms.¹ The rite itself often includes circumcision. With girls, instruction is given in household duties and sometimes a period of seclusion in a hut is imposed when they reach puberty; in some cases the ceremony also involves an operation. The military power of the Zulu was based on the training given to each age-grade at the chief's head-quarters after initiation. In Bechuanaland, where the age-grade system still flourishes, the regiments are held liable to work at the chief's orders, and may even be ordered to go to the Rand mines and earn a stipulated sum of money.

The Ganda, who were formerly the most powerful tribe of the regions round Lake Victoria, had no initiation and no organization into age-grades. Among them the whole nation was raised in arms, each chief leading his own subjects when one of the periodical raids upon neighbouring peoples was decided upon; it is said that in five days from the first summons the whole man-power could be concentrated at the capital.

In Bantu Africa, and similarly among the West African Negroes, tribes which have important chiefs usually attach ritual and magical functions to the duties of chieftainship. Among most of them the chief is responsible for carrying out ceremonies on which the prosperity of the country and the fertility of land, herds, and people are supposed to depend. If his ministrations were unsuccessful, he would in some tribes be deposed or even killed. Among the Lacustrine peoples a special priesthood was responsible for the performance of religious ritual, and there existed a cult of the spirits of dead kings, who were believed to prophesy through the mouths of the attendants at their burial-places.

With the majority of the Bantu, as with most other African tribes, religion was based on sacrifices to their ancestors made by the senior member of each family, extended family, or clan. In some cases these were made regularly, in others only when some illness or misfortune was believed to indicate the ancestors' displeasure. Here the Lacustrine Bantu are peculiar² in that with

¹ F. Laydevant, 'La poésie chez les Basutos', *Africa*, vol. iii, no. 4, 1930.

² L. P. Mair, *An African People in the Twentieth Century*, 1933, pp. 224, 229.

them ancestor-worship seems to have been of little importance in comparison with the cult of the various tribal deities or *lubale*, whose shrines were established all over the country, and who dispensed, through their prophets, the various benefits which were believed to be in their gift.

(b) *The Negro tribes*

Numerically the Negro tribes of West Africa are roughly equal to the Bantu, though the area which they occupy is smaller. The coastal regions of West Africa, with their rich soil and heavy rainfall, support a denser population than the relatively arid east and south, and it is only round the shores of Lake Victoria that the population density of the Bantu tribes approaches that of the regions occupied by the Negroes. The long-horned cattle of the Bantu are not found among any West African tribes, a fact which is taken as showing that the Negroes are untouched by Hamitic influences. In the coastal regions, which are free from tsetse, a local variety of dwarf cattle is found, but the majority of the Negro tribes are purely agricultural. A considerable amount of economic specialization exists among them; whole villages will be formed of potters, dyers, weavers, or other craftsmen. As a result, frequent markets are held, and a striking feature of the Negro peoples is the active part which women take in trade;¹ an interesting example in modern conditions is the woman contractor for food to the Native Administration prison at Ibadan.² Most of the West African Negroes live in walled compounds in which a number of related families, under the authority of the senior member of the group, inhabit adjoining houses. Density of population and economic specialization together have led to the growth of large cities; in Southern Nigeria eleven towns have a population of over 50,000.

Every degree of political centralization and its absence is to be found among the Negro tribes. As an extreme case of dispersion of authority the Ibo-speaking peoples have already been quoted. Even within their 2,000 units there is no single ruler; the village elders, the priests, the individuals who have attained influence

¹ S. Leith Ross, *African Women: A Study of the Ibo of Nigeria* (to be published, early 1939).

² M. Perham, *op. cit.*, p. 182.

through wealth and personality, share in the exercise of authority. Some of the tribes of the Gold Coast northern territories are comparable in their absence of centralization. In contrast the Akan peoples of the Gold Coast have chiefs ruling with their councils over large areas. In some cases a paramount receives allegiance from a number of chiefs; a notable example is the Ashanti confederacy, dissolved by the British Government after the Ashanti wars and re-established in 1935.¹ The Gold Coast tribes have a regular procedure for the deposition of a chief, recognized by native custom and all too frequently resorted to in modern times.²

In French territory the Tukolor formerly held sway over most of the country between the Senegal and the Gambia. Farther east the Songhai, a tribe numbering about 2,000,000, ruled over the country south of Timbuktu until the French took that city, while the Mossi, whose power once extended from the upper Volta to include the Dagomba and Mamprussi of the Gold Coast northern territories, still have a centralized government with its capital at Wagadugu.

Midway in size between the fragmented units of the Ibo and the large states of the Tukolor and Mossi are the countries of the Yoruba in Nigeria. Their neighbours, the small kingdoms of the Igala, Igbirra, and Jukun, have chiefs who are the object of peculiar magical beliefs obliging them to respect complicated taboos the breach of which in former times involved their death after a relatively short period of office.

Among most Negro peoples considerable influence is exerted by secret societies, membership of which is obtained by the payment of dues and carries with it certain immunities from the ordinary processes of law. Among the Ibo there are women's societies which are responsible for the maintenance of discipline and respect for custom among the women.³ These societies were at one time regarded as organizations which held the community to ransom for their private profit, but it has now been realized that they had valuable functions in preventing crime and securing respect for law. Cannibalism and human sacrifice enter into the ancient

¹ See Chap. IX, p. 473.

³ M. Perham, *op. cit.*, p. 226; S. Leith Ross, *op. cit.*

² *Ibid.*, p. 469.

customary rites of some Negro peoples, but these practices have received publicity in Europe out of all proportion to their importance in Africa. Far more widespread is the cult of earth-spirits, closely associated with the spirits of the ancestors, in whose hands the fertility of the soil is supposed to lie. In the Gold Coast northern territories, for example, the *tendana* or priest of the land exercises almost as much power as the political head of the community;¹ indeed, in some cases it was the holder of this office who was selected by the German administrations of Togoland for the position of chief. In some instances the *tendana* is a representative of a conquered tribe to whom the conquerors pay respect as the only means of securing the favour of the spirits. Among the Ibo-speaking tribes the earth-goddess Ala is described by Dr. Meek² as 'the unseen president of the community'. In every village she has a shrine, and her priests, as guardians of morality and of the public peace, frequently have political or judicial functions.

The Hamitic conquests which gave rise to the Lacustrine kingdoms of East Africa have their parallel in the penetration of West Africa by invaders from the north. Of these the earliest were the Hausa, who now constitute nearly one-third of the population of Northern Nigeria; they are found in all the towns, their chief centres being in the Emirates of Sokoto, Katsina, Kano, and Zaria. Akin to them are the Kanem, Kanuri, and Baghirmi, who have built up kingdoms around Lake Chad. The Hausa are predominantly Moslem; they are traders and their language has become a lingua franca over a wide area. Since the early part of the nineteenth century their political predominance in Nigeria has given way to that of the Fulani, Moslem invaders who are Sudanese by language, but seem to be related to the peoples of Algeria and Morocco. To-day only some 300,000, the so-called 'cow Fulani', out of a total of about 2,000,000, cling to their nomad pastoral life. The highly developed political organization of the Fulani emirates was the first to be utilized in the policy of administration through existing native authorities which has now been widely extended through British territories.³

¹ R. S. Rattray, *Tribes of the Ashanti Hinterland*, 1932.

² C. K. Meek, *Law and Authority in a Nigerian Tribe*, 1937, p. 25.

³ See Chap. IX, pp. 416 ff.

(c) Hamitic Tribes

There remain to be described those tribes of eastern Africa which are Hamitic or in which the influence of the Hamites is evident in their culture and in some instances in their languages. In this area only the Galla and Borana of Abyssinia and the Kenya Northern Frontier Province are regarded as purely Hamitic; but the so-called Nilotes and Nilo-Hamites closely resemble them in mode of life. All these are cattle-owning people. The Galla and Borana, the Masai and Turkana, are still nomadic. The Nandi and Suk of Kenya, with the Teso of northern Uganda, now live in settled villages and practise agriculture. Other tribes of this area may be described as semi-nomadic, since they practise agriculture but move with their flocks. Characteristic of these tribes is the organization of the men into age-grades. It is usual here for authority to be exercised jointly by the elders' grade, while the tribal head, though he may be a man of great personal influence, has only religious functions. The attachment of these people to their own institutions, and their indifference to European influences, has been marked; they prefer their cattle to traders' goods, and the stimulus of money has not induced the pastoralists either to take to agriculture or to send their young men to work in any numbers.

This necessarily incomplete summary shows the wide variety of native society to be found in Africa, and the danger of generalization regarding the nature of African life. There are, however, salient characteristics in which African institutions and values may be said to differ markedly from those which European administration has brought to the continent. Such characteristics are the predominance of a subsistence economy without great differences in individual wealth; the recognition of close bonds of kinship uniting in obligations of mutual aid a group larger than the individual family; the existence of close bonds between such groups and the land which they have acquired from their ancestors or by conquest.

(d) Religious Beliefs and Social Concepts

Certain religious beliefs are shared by Negroes, Bantu, and Hamites, except where Islam and Christianity have established themselves; amongst these is a common belief in the unity of the

dead and the living which has led a Belgian observer to describe the tribe as 'une communauté de vivants et de morts où ces derniers ne sont pas les moins puissants'.¹ The soul, conceived as the vitalizing force in man, is believed to emanate from an unseen world composed of the spirits of the dead and of other spirits. Thus it is commonly believed that a spirit is responsible for animating the body of the unborn child, and careful divination at birth is necessary to ascertain the identity of the vivifying force. Spirits are thought to be quick to avenge, by causing disease and calamities, ills suffered during life, or disrespect shown to their graves or to their memory. Such beliefs act as a powerful sanction for native custom and are embodied in a cult of ancestor-worship with regular observances. In times of distress and illness steps are taken to discover which spirit is responsible, and to propitiate it by a simple offering.

The practice of magic both for beneficial and harmful purposes is common to African tribes. It is generally believed that the ritual treatment of certain substances by persons possessed of special powers can affect human beings, animals, or crops in a manner which is recognized to be outside the ordinary course of nature. Very commonly the substances used have qualities associated with the effects which it is desired to produce: thus magic to produce courage in war may include portions of a lion among its ingredients, and in many tribes the fertility of the soil is held to be directly influenced by the sexual life of the chief. In some tribes magic is performed by the chief on behalf of the community; in others it is the work of specialists, such as the priests of the small-pox god in Buganda who used to purify the villages after an epidemic. The two types of magic are usually distinguished in native speech; only harmful magic can approximately be called sorcery, and this is universally regarded by Africans themselves as a heinous crime. The witch-doctors derive their power from the belief that by divination and other means they are able to indicate sorcerers and protect the tribe and individuals against the practice of harmful magic.

Belief in magic has a psychological value in that it provides an explanation of unexpected misfortune, and an appropriate course

¹ P. Salkin, *Études africaines*, 1920, p. 104.

of action: in practice retaliation by magic is more common than the execution of the supposed sorcerer. It has its importance as a social force, since recourse to sorcery as a means of redress for injuries is held to be justified: this is a powerful sanction for general conduct, and in particular cases the threat of sorcery can produce such results as the return of stolen goods. Belief in magic would seem to be strong to-day among Christian converts as well as among pagan communities.¹

Many tribes have a conception of a Supreme Being, but it is not, as a rule, an object of worship, since it is held to take little interest in the everyday life of mortals.² Indeed, speculations or beliefs as to the attributes of a Deity occupy a minor place in the spiritual life of Africa; the dynamic of religion lies rather in the influence of the spirit world on daily life and in the importance attached to the use of magic. Yet it would be an error to suppose that the African feels himself hopelessly dependent on supernatural powers or superstitious practices; he is far from being the gloomy slave of a world of tyrant spirits; cheerful and resilient, he clearly feels that much still depends on his own discretion and industry, and his religion may be said to have reinforced rather than weakened his self-reliance. There is a further point. Every contribution made to the study of African religion or of the practices of social life, tends to emphasize the danger of treating Africans as types rather than as individuals. Like other peoples, they may have common ideas about religion or custom, but individually show every variety of human feeling or ability.³ The study of African religion or social life may assist the administrator to avoid errors due to ignorance of the general characteristics of the people, but he will remain in the end faced by a collection of individuals who, if powerfully affected by their own tradition, nevertheless show the widest differences of personal temperament and character. It is opportune to add here another consideration. In subsequent chapters reference will be made to the extent of our knowledge of African concepts on certain important aspects of social life, such as law and justice, the holding of property, and political organization. The sum of these studies

¹ See *Africa*, vol. viii, no. 4, 1935.

² D. Westermann, *Africa and Christianity*, 1938, p. 65.

³ M. Perham (ed.), *Ten Africans*, 1936.

undoubtedly presents a striking contrast to the European type of civilization now being introduced to the African; but a difference of religious concepts or of social observances, however marked, does not in itself convey any indication of an intrinsic divergence of character or capacity. There are indeed few of the observances of Africa to which a close parallel cannot be found at some period or another in the history of peoples now within the orbit of modern civilization. Social concepts and practices are largely an accommodation to physical or economic conditions; and it is more important to study the reactions of the African to the rapid changes in cultural and material environment to which he is being subjected, than to attempt any analysis of his character based on his traditional customs or beliefs.

II. PROBLEMS OF ETHNIC CLASSIFICATION

It is now generally recognized that the population of the modern world cannot be effectively classified into races by applying the methods employed in dealing with distinct zoological or botanical groups. On the usual zoological system¹ animals are grouped according to estimates of the degree of their evolutionary relationship; and there is throughout an underlying idea of common ancestry. It was inevitable that a similar method, based on like assumptions, should have been attempted in regard to human beings, but anthropologists have recognized that other methods are required in seeking to trace the relationships of the groups into which the species *Homo sapiens* became divided. Man has migratory propensities. Thus, while in most animals localization leads to the formation of distinct geographical races, and may result in the differentiation of these as mutually infertile species, in man local differentiation has been followed by migration and crossing between the differentiated groups, so that mutual infertility has not been produced. Therefore, while in general in the classification of zoological types degrees of resemblance can be taken to indicate degrees of relationship, caution is required when applying this conception to the sub-varieties of modern man. In the case of man we can do no more than attempt to distinguish geographical

¹ J. S. Huxley and A. C. Haddon, *We Europeans*, 1935, chap. iv.

groups in terms of their measurable physical characteristics; and we must be content with group rather than individual characteristics, such as averages, or better, frequency distributions, of different characters. In the majority of groups, therefore, a number of physical types will be present which appear to be characteristic of the original components of the mixed group, but there will also be found numerous intermediate types and usually a certain number of individuals who appear to be new aberrant types, due to recombination.

Certain characteristics are currently used as a basis of racial classification. The most important are hair form and colour, skin colour, eye colour and form (including the orifice of the eye), stature (though this may be affected by nutrition), head form, which is believed to be relatively unchanged by environment and which lends itself to the convenient measurement of cranial index,¹ and nasal form (including bony structure and spread of nostril). In addition there are physiological and psychological factors, such as pulse-rate, incidence of disease, colour-vision or sense-perception, the ethnic significance of which are not yet precisely defined, and the new and promising approach through blood-groups. This last method is based on the discovery by L. and H. Hirsfeld that, in point of agglutination of blood, all human beings fall into four main groups. These differences depend on three allelomorphic genes, so that blood-grouping is inherited in a simple way, which is not the case with the usual physical criteria by which human groups are defined; it is accordingly possible that a complete study of the blood-group genes might throw light on the origin of various human populations. So far, however, many of the results obtained reveal a complex situation which still requires explanation. Finally comes a group of special physical peculiarities confined to a single group—such as the ‘Mongolian eye’—which are useful to the anthropologist. The most striking of these is *steatopygia* (i.e. an excessive accumulation of fat on the buttocks), found among Bushmen and Hottentot women.

It appears clear that the use of physical characters, however carefully elaborated, will not in itself afford a basis of classification, in the sense of making it possible to delimit groups all

¹ Maximum breadth of the head expressed as a percentage of the maximum length.

members of which are marked by common and clearly defined characteristics. If any single criterion of difference is taken, such as skin colour or cephalic (cranial) index, it is possible to show that it has a fairly definite geographical distribution; but the classifications based on different criteria do not coincide closely.¹ One can speak of a characteristic physical type which occurs predominantly in a given geographical area; but it would be inaccurate to suppose that a person's ancestry could be deduced from the degree of his conformity with that type; in any area which may be studied, whether it be the territory of a European nation or an African tribe, the population shows a wide range of deviation from the average in every measurable characteristic. Moreover, while in terms of averages it may be possible to say, for example, that Ganda are taller than Kikuyu, there will always be a considerable measure of overlapping, so that the tallest of the second group is a good deal taller than the shortest of the first. This is the case with most measurable features.

The present state of our knowledge with regard to the physical characteristics of the African peoples has been summarized by Dr. G. M. Morant.² Anthropometric records have been collected since about 1860; but many of the measurements made have been the work of observers who have had no technical training. The most adequate surveys so far made relate to parts of North Africa. The value of the work done up till now has been in indicating the nature of the problem rather than in providing solutions. It has been found, for example, that in Central Africa the ranges of cephalic indices and of statures reach extremes almost as far apart as those shown by all races in the world, and that there appears to be little correlation between the averages of these two characters for different groups. A grouping based on nasal measurements would be quite different from that given by either cephalic index or stature. A satisfactory classification can thus only be based on the comparison of a number of physical characters.

The study of blood-grouping has not been carried as far in

¹ L. Hogben, *Genetic Principles*, 1931.

² Quoted by E. W. Smith, 'Africa: What do we know of it?', *Journal of the Royal Anthropological Institute*, vol. lxxv, 1935, pp. 35-7.

Africa as in some other parts of the world; a comparatively small number of persons have been examined and the majority are natives of the Union and South-West Africa, though a considerable study has also been made of blood-grouping in the Pygmies. Dr. A. Pijper¹ suggests that the high incidence among Bushmen of the O blood-group, which is regarded as the most primitive, shows that they were the first inhabitants of Africa. Mr. Elsdon Dew² concludes that the Bantu are the most primitive black race now known, and that the Negroes are the result of a mixture of Bantu with other stock, such as the Egyptian. It is clear, however, that this new criterion, important as it is, cannot be taken, any more than any single character, as sufficient in itself to establish a classification of races. It has been found elsewhere that clear differences in the percentages of the blood-groups can be found among groups of persons differing only slightly in other anthropological features, while some populations differing clearly in other respects showed similar blood-group distributions.

A comparison of the measurements of some 600 skulls from different parts of Africa, published by other anthropometricians, with those of 120 skulls from the Teita region of Kenya, was made in 1931 by Miss Elizabeth Kitson.³ This leads to the conclusion that no sharp distinction can be drawn between the races of western, eastern, and southern Africa; skulls found in the Gabon resemble those of East and South Africa more closely than those of the Congo. The Teita skulls are more nearly related to those of the Ngoni and Hottentots than to those of their neighbours in Tanganyika, while the latter, in certain features, resemble the Galla and Somali and the predynastic skulls from Egypt. All the material dealt with by Miss Kitson is modern in date; skeletal material furnishes the only evidence of the physical characters of past populations which the anthropologist is likely to obtain, but, except in Egypt, there is an almost complete lack of such evidence bearing on the origins and early movements of the populations which now inhabit Africa. A few prehistoric skeletons have been

¹ 'Blood-Groups of Bushmen', *South African Medical Journal*, vol. vi, 1932.

² 'Serological Differences between Various Groups of the Bantu of Southern Africa', *Bantu Studies*, vol. viii, 1934; and *Publ. S. Afr. Inst. Med. Res.*, no. 39, vol. vii, 1936.

³ 'A Study of the Negro Skull, with Special Reference to the Crania from Kenya Colony', *Biometrika*, vol. xxiii, 1931, pp. 271-314.

discovered, but the evidence which they provide is insufficient to form the basis of a conclusive theory.¹

The study of human genetics is of social importance because of its possible bearings upon differences in the mental capacity of various human groups. Two opposing theses have been equally freely assumed: that the brotherhood of man implies universal equality of innate capacity, and that those nations which are in a position of domination over others have superior inherited qualities. Neither school of thought can turn, in support of its view, to any data experimentally obtained.

Anthropologists and others have suggested various ways in which conclusions as to the mental qualities of different races might be drawn from their physical characteristics. The American anthropologist, Professor Kroeber, suggested that 'if one human race shall prove definitely nearer to the apes in its anatomy than the other races, there would be reason to believe that it had lagged in evolution'. Also there would be some presumption that its arrears were mental as well as physical. The question could be approached by counting all features of all races in order to see which was the most un-ape-like. But the result, as he pointed out, would be 'an evenly divided count, whichever way the majority fell'.² It will now be generally agreed that the process of evolution within a species, especially one with such a degree of intercrossing as is found in man, cannot be reconstructed in the form of a simple pedigree, since similar types can be produced not only by inheritance from a common ancestor but by the Mendelian recombination of characteristics which may have been quite differently distributed in the ancestry of two individuals.

The possibility of finding a means of measuring the comparative mental capacity of Africans has lately formed the subject of some public discussion as the result of certain proposals for inquiry put forward by Dr. H. L. Gordon of Nairobi.³ In an examination of 3,444 Kenya natives Dr. Gordon found 'consistent inferiority

¹ L. S. B. Leakey, *The Stone Age Races of Kenya*, 1935, *Stone Age Cultures of Kenya*, 1931; see also correspondence in *Nature*, 1931-7.

² Quoted L. Hogben, *op. cit.*, p. 162.

³ *The Times*, Nov. 25, 1933; H. L. Gordon, 'The Intentional Improvement of Backward Tribes', *East African Medical Journal*, vol. xi, no. 5, 1934-5, pp. 143 ff.; 'A Rumination on Research and Eyewash', *ibid.*, vol. xiii, no. 4, 1936-7, pp. 110-19.

in brain capacity as estimated by head measurements and in certain physical and psychophysical attributes' as well as in performance in intelligence tests.¹ He found that the average increase in volume of the African brain between the ages of 10 and 20 is 8.5 c.c. as against 17.7 c.c. for the European, while the average adult capacity of African and European brains is 1,316 c.c. and 1,481 c.c. respectively. Complementary research by Dr. F. W. Vint,² of the Government Medical Research Laboratory, Kenya, showed further similar contrasts. While not claiming that his observations have been sufficient to form the basis of any far-reaching conclusions, Dr. Gordon considers that they establish the existence of a state of 'backwardness' in the tribes with which he has dealt. He has devised a term—*bradyphysis*—to denote the condition of the Kenya tribes which he describes as 'a non-progressive state showing deficiencies of social, moral, intellectual, and material self-development'. He assumes that *bradyphysis* is an abnormal state, and has proposed that systematic inquiry into its causes should be undertaken as a basis for future plans of development.

Scientifically, two criticisms may be levelled against the views put forward. So far as concerns conclusions drawn from brain measurements, it must be realized that nothing is definitely known regarding any correlation between the physical characteristics of the brain and intellectual or moral qualities. So far as concerns the assumptions regarding inherent characteristics which have been based on more general arguments, we are faced with a fundamental difficulty. The abnormal condition of the Kenya native is taken for granted; yet it is difficult to see what is to be the criterion of normal 'self-development', or exactly how *bradyphysis* is to be diagnosed. Is it recognizable by the failure of the people affected to have attained a certain cultural level before they were subjected to European influence and, if so, what is the level which normal development would have attained? Or does it appear in the reaction to European influences? In the latter case the methods by which those influences have been exerted, and the degree to which they permitted of the developments

¹ 'The Mental Capacity of the African', *Journal of the African Society*, vol. xxxiii, no. cxxii, 1934, pp. 226-43.

² 'A preliminary note on the Cell Content of the pre-frontal Cortex of the East African Native', *East African Medical Journal*, vol. ix, no. 2, 1932-3, pp. 30-55.

which have taken place in neighbouring territories, would be as relevant to the investigation as an assumed inherent incapacity for adjustment in the peoples of Kenya.

There would seem, in consequence, little advantage to be derived from the suggested inquiry into the physical characteristics of the African's brain as a basis of conclusions regarding his mental capacity. Certainly research of this type could not produce results of the social and political importance which some have expected from it. As regards the proposed inquiry of a more general nature into the causes and the assumed 'backwardness' of the Kenya tribes, while research into the physical characteristics or the psychology of the African is to be welcomed, such inquiry tends to lose its value as soon as it ceases to be objective, and it would not be reasonable to suggest support for an investigation based on assumptions such as those which characterize the theory of Kenya *bradyphysis*.

Comparisons between groups of persons of different descent have at times been based upon their performances in intelligence tests. In the United States such a test was given to all army recruits during the War, and resulted in every State in higher scores for whites than for negroes; though the fact that the negroes of the Northern States did better than those of the South is an indication of the importance of environmental conditions in producing the type of intelligence that was being tested. At one time hopes were entertained that important conclusions regarding racial abilities could be drawn from tests of this kind, but as the methods used came to be examined more critically it was realized that they were not so devised as to eliminate the effects of differences in environment and upbringing. An investigation made in Jamaica of samples of the white, negro, and mixed population had the advantage that there the differences in social environment between the different groups are not great. In this case very little difference could be found between the aggregate performances of the different groups; some excelled in one type of test, some in another.

If we adopt the definition of intelligence given by C. Spearman,¹ its most important element is the ability to educe relationships. In seeking to determine the potentialities of the African

¹ *The Abilities of Man*, 1927.

intelligence in the sense of its power to learn, whether from a teacher or from experience, this is the quality which must be measured. The possible methods of measurement would be by the posing of problems which normally arise in the environment of the person tested or by the construction of non-verbal tests involving the recognition of relationships. The first method is of course open to the criticism that the results achieved would not be comparable with those attained in other tests. The second obviates this difficulty, but up till now very few such tests have been devised.¹ A general intelligence test for Africans, representing an adaptation to local conditions of the technique most widely used in Europe, was published in 1932 by Mr. R. A. C. Oliver,² who investigated this question on behalf of the Carnegie Corporation. The test requires an elementary degree of education. It is advocated for the limited object, which is all that psychologists now expect of most such tests in Europe, of determining how far school-children at a given stage can profitably proceed to further education. This test was not devised with a view to drawing comparisons between African and European intelligence. The author himself expresses the view that none of the grounds of comparison so far used yields valid or decisive data, and that no existing mental test can be used as a standard of comparison between populations which differ widely in culture. Nevertheless, the results of its application to 93 African and 124 European secondary schoolboys in Kenya have a certain interest. The average mark of the Africans was approximately 85 per cent. of that of the Europeans, but some 14 per cent. of the Africans, in spite of the group's undoubtedly lower level of environment and education, gained marks as high as, or higher than, the European average. Standardized tests were used on a large scale by the Interdepartmental Committee on Native Education of the Union of South Africa during 1935-6.³ They were applied to some 12,000 African pupils comprising practically all those in Standard VI and above in all four Provinces. The tests used were those which had previously been standardized in

¹ See L. S. Penrose, *Mental Defect*, 1933.

² 'Mental Tests in the Study of the African', *Africa*, vol. vii, no. 1, 1934, pp. 40-6.

³ *Report*, U.G. 29, 1936, paras. 502-12.

connexion with nearly 30,000 pupils in European schools, and were tests of knowledge gained in school rather than intelligence tests as that term is usually understood. They consisted of arithmetical questions and problems, and of tests of familiarity with English words, both simple and difficult. The comparisons between European and African children which were based upon them refer to the quality of the instruction received rather than to natural intelligence.

It should be noted, moreover, that even in the Kenya experiment these conclusions relate to a single characteristic—a proficiency in those mental processes which the European system of education seeks to develop. They do not in themselves afford evidence in support of the assumption that the mental capacity of Africans is inferior to that of Europeans, even judged by standards primarily devised with reference to European conditions. They tell nothing of the probable success of the average African in agriculture or in business: practical thinkers may indeed be permitted to doubt whether it is in fact possible to devise tests which would enable such characteristics to be ascertained.

While further investigations are essential to the development of the process of ethnic classification, the results are likely to be of scientific interest rather than of direct concern to administrators. A more extended use of intelligence tests, on a basis suited to African environment, is likely to yield results which may be of value to the educationalist; but it is doubtful if any general investigation into the comparative mental capacity of the African can yield conclusions which will form a safe basis for the determination of general administrative policy.

III. STUDIES IN AFRICAN SOCIAL LIFE

(a) *The Knowledge of African Life and Custom*

In Africa there has developed a general recognition that policies which do not take into account the nature of the native societies to which they are applied are apt to provoke unforeseen and unwelcome reactions. Towards the end of the nineteenth century Mary Kingsley emphasized to the English public the need for a wider knowledge of the facts of African life; she justly remarked

that in colonial rule goodwill is no substitute for knowledge which 'will act in the direction of preventing us from engineering our good intentions in such a manner as to make them appear tyrannies and hateful to those whom we wish to benefit by them'.¹ It would be possible to point to many errors due to the misinterpretation of native customs.² Perhaps the most typical example is the disapproval shown by early missions of native marriage rites, the importance of which, in giving legal validity to marriage, they did not understand; the influence of this attitude was seen in official declarations of policy such as Sir Harry Smith's demand to the Kaffirs in 1848 that they should 'abolish the sin of buying wives', and in the judicial practice by which courts in some parts of South Africa refused to take cognizance of marriage contracts based on the payment of *lobolo*, the bride-price.³ It was not until 1927 that the Union Native Administration Act, in stipulating that the courts should not declare *lobolo* repugnant to natural justice, recognized the true character of this institution.⁴ Numerous difficulties have been caused by the official recognition as chiefs of persons holding no traditional authority, or by a misunderstanding of the true functions of chieftainship. Governments have been constrained to admit mistakes due to their failure to appreciate the nature of African land-tenures.⁵ The conclusion of the inquiry into the disturbances of 1929 in south-eastern Nigeria, that taxation should not have been introduced until further knowledge had been gained of the social institutions of the people,⁶ is one of the many instances in which the need for full information as a basis for administrative action has been recognized; and in the same region the success achieved in the reorganization which was later carried out to meet the special needs of the social organization found to exist affords a striking example of the value of a close study of native institutions.

¹ S. Gwynn, *Life of Mary Kingsley*, 1933, p. 238.

² See, e.g., Chap. IX, p. 424, Chap. XII, p. 837.

³ See Chap. IX, p. 362; I. Schapera in *The Bantu-speaking Tribes of South Africa*, 1937, p. 381. Although *lobola* is the more common usage, *lobolo* appears to be the correct form of the Zulu-Xhosa noun.

⁴ *Report of the Native Economic Commission*, U.G. 22, 1932, pp. 102-4; E. H. Brookes, *The Colour Problems of South Africa*, 1934, p. 145.

⁵ See Chap. XII, pp. 836 ff.

⁶ *Sessional Papers of the Nigerian Legislative Council*, Nos. 12 and 28, 1930.

The acquisition of a more complete knowledge of African social conditions is a composite process, in which a great variety of agencies have taken part. It is not the result only of inquiry directed to this specific purpose. The change in general policy, which recognizes the value of African institutions as part of the new structure now being created, is in itself important alike as an incentive to the study of custom and to its more competent interpretation. The experience of administrators and missionaries, of educationalists and the growing body of technical officers, has made contributions which, if often unrecorded, have nevertheless had their own significance in building up the body of knowledge of native life and custom. One of the present problems of the administrations, however, is to determine how far the knowledge thus acquired needs definite correlation, or should be supplemented by special investigation of the type associated with the methods of the anthropologist. It is to this latter point, therefore, that we shall first direct attention.

(b) Aims and Methods of Social Anthropology

The presidential address delivered to the Royal Anthropological Institute in 1935¹ examined the field covered by anthropological studies in Africa, including its archaeology and palaeontology. In the Survey on which we are now engaged it is natural that attention should centre mainly on those aspects of anthropology which bear most closely on the problems presented by the changes now taking place in Africa. The development of anthropological inquiry, as of all scientific studies, has been due to contributions from many sources, and from thinkers holding different aims. It is unnecessary here to attempt to assess the value of the additions made by different schools of thought to anthropological knowledge; it is sufficient to say that, for the present purpose, a study of cultural origins, by whatever method it may be pursued, is of less importance than that type of inquiry which concerns itself with existing peoples and their social institutions. This branch of anthropology is variously described as social, practical, and functional; its avowed object is to assist the government and development of the peoples studied, and attention is concentrated on

¹ E. W. Smith, *op. cit.*

the practical problems involved. Modern anthropological work of this type in Africa attempts to record the behaviour of the African in his reaction to indigenous and imported influences, and it is progressively devoting greater attention to the latter. It aims at exposing the influences which have results in behaviour; it views reforms, such as the preservation of soil fertility and the introduction of direct taxation, not only as problems of agricultural practice or administrative action, but as changes in human behaviour. At its best, it indicates how a desirable reform may be brought about in such a way as to harmonize with the custom of the people whom it affects.¹

How far the knowledge of earlier custom is necessary for these purposes has been the subject of some debate. Since practically all African tribes have been undergoing organic changes for many centuries, both under external influences brought in by Hamitic invasions, Arabs, and Europeans,² and under internal influences due to natural disasters, the evolution of agriculture and the consolidation of chiefdoms, the complete reconstruction of a previous social structure at one point of time presents great difficulties and would be of little practical value. In order to interpret the reactions of Africans to European culture, however, it is necessary to be in a position to distinguish the elements borrowed from Europe from those indigenous to the native community. The study of African reactions to European culture, in such matters as marriage, inheritance, the private ownership of land,³ and the sanctions for law and order,⁴ is perhaps the most important aspect of anthropological work to-day.⁵

Anthropological inquiry was at one time largely concentrated on the Pacific Islands. The greater attention now being devoted to Africa is due primarily, no doubt, to the improved conditions which that continent has offered to research workers in recent years, and also to some extent to the practical problems created

¹ See Chap. XVI, pp. 1106 ff.

² For the early European influences in Africa, see Sir H. H. Johnston, *The Opening Up of Africa*, 1911.

³ See Chap. XII, pp. 836 ff.

⁴ See Chap. VII, pp. 264 ff.

⁵ For studies on culture contacts see A. I. Richards, L. P. Mair, M. Hunter, I. Schapera, A. T. and G. M. Culwick, M. Fortes, and G. Wagner, in *Africa*, vol. v, no. 2, 1932; vol. vii, nos. 3 and 4, 1934; vol. viii, nos. 1-3, 1935; vol. ix, nos. 1 and 3, 1936.

by the attempts to use African institutions in the administrative organization of colonial territories.¹ This increased interest owes much to the establishment, by the University of Capetown in 1918, of a School of African Life and Languages, and it received a stimulus in 1926 from the publication of *The Golden Stool*,² which made a survey of the results of European contact on native societies, and appealed for understanding and respect for institutions in danger of destruction, which it would be difficult to replace in a changing social structure. In France similar arguments have been advanced,³ and a Belgian writer has pointed out various instances in which policy in the Congo has failed to make due allowance for native custom.⁴

In the early years of this century anthropologists usually followed the method of 'survey work' in which the inquirer travelled over a wide area recording for each tribe the broad characteristics of physical type, social organization, and material culture. In Rivers's survey work among the Todas in Melanesia (1901-2) he spent a short time in each island, and sometimes questioned not more than one informant. Dr. J. Roscoe, who spent twenty-five years among the Ganda,⁵ states that he obtained much of his information from natives who were brought to his home from various parts of the country. It is now realized that information obtained in this way needs to be supplemented by more detailed inquiries. In England the volumes published in 1922 by Malinowski⁶ and Radcliffe-Brown⁷ have had a marked influence in establishing the methods which are now followed by numerous field-workers. In present-day practice knowledge of the language of the people under investigation and an acquaintance with the philological principles by which behaviour is related to forms of expression are regarded as important if not indispensable.⁸ The worker is expected to keep daily diaries, to collect case-histories and statistics, and to make plans of villages and gardens. Inquiry proceeds by the method of taking samples which are typical of

¹ See Chap. IX, *passim*.

² E. W. Smith, *The Golden Stool*, 1926.

³ L. Vignon, *Un Programme de politique coloniale*, 1919; H. Labouret, *A la recherche d'une politique indigène*, 1935.

⁴ G. van der Kerken, *Sociétés Bantoues du Congo Belge*, 1920.

⁵ *The Baganda*, 1911.

⁶ *Argonauts of the Western Pacific*, 1922.

⁷ *The Andaman Islanders*, 1922.

⁸ See Chap. III, p. 100.

larger units:¹ the inquirer must know, however, what sample is big enough to be reliable and yet not so big as to waste effort. In using the statements of informants he has to appreciate whether his source has experienced the typical influences to which the group has been subjected, or whether he has come under exceptional influences. Opinions rationalized with the intention of enlightening a European have to be discounted. A technical approach is considered necessary, not only in acquiring data, but in recording them. To take one example, it has been found necessary to list and analyse with special care the sequence of crops, for this has sometimes revealed a complicated long-period rotation which earlier investigations had failed to detect. Finally, the inquirer must be in sympathy, not only with the African, but also with the administrator whose work it is his object to assist.

(c) *Governments and Anthropological Inquiry*

There can be no question as to the value of the information which inquiries of this nature set out to provide. We may at the present day dismiss considerations based on the feeling that an 'anthropological interest' in native institutions may lead to an undue conservatism in maintaining custom which is either undesirable in itself or has outlived its use.² It is, however, true that governments have, as a rule, given little direct support to specific inquiry of the type above described, either by the creation of a post of government anthropologist or by subsidizing the work of research students. They have for the most part been content to rely on the information supplied by their administrative officers, based either on their general experience or on inquiries which they have been directed to make. The Indian Government also has made little use of the anthropologist; but there the circumstances were different from those of Africa. At the date of the British occupation ample material existed in the works of Indian writers

¹ B. Malinowski, 'The Rationalization of Anthropology and of Administration', *Africa*, vol. iii, no. 4, 1930, pp. 405 ff.

² P. E. Mitchell, 'The Anthropologist and the Practical Man', *Africa*, vol. iii, no. 2, 1930, pp. 217-23; *Discours du Président, Compte rendu de la première session du Congrès International des Sciences Anthropologiques et Ethnologiques*, London, 1934, pp. 15-18. See also E. H. Brookes, op. cit., chap. vi; M. Perham, 'A Re-statement of Indirect Rule', *Africa*, vol. vii, no. 3, 1934, pp. 321-34.

regarding the Hindu and Moslem custom which regulates the life of the great majority of the inhabitants, the linguistic difficulty was relatively small, and there were from the first included in the government services a number of Indian officers whose special knowledge was available on all questions in which Indian law or custom was involved. The official cadre was, again, of a strength which allowed for the provision of officers required for special inquiry on any point calling for detailed examination; and it was typical of the system that the officers who compiled the land revenue 'settlement reports', a valuable source of information on all local conditions, normally spent at least three years over the work of each district. It was in consequence only in certain of the areas separately administered as 'backward tracts' that anything of the nature of special study was felt to be required.

There is perhaps little to be gained by any detailed examination of the reasons why African administrations have not hitherto given more encouragement to workers using the method employed by social anthropologists. Possibly there is still in some quarters a belief that anthropology is a study mainly of antiquarian or academic interest; it may be felt by others that the modern anthropologist is so much absorbed in demonstrating the inter-action of all the social institutions in the wide field which he covers that he provides at no one point the type of information which can be readily used by the administration. It may be, again, that governments have been reluctant to admit that they are dependent on outside sources for information which should, in theory at least, be obtainable through their own officers; or that they are apprehensive of the influence which non-official inquirers may be tempted to exercise over the day-to-day decisions of the administration.

Government officers who have spent the greater part of their lives in Africa are apt to question the value of an anthropological inquiry lasting a comparatively short time; but while many officers have a profound and sympathetic understanding of the peoples among whom they have worked, and have made studies of considerable value to governments, experience has shown that the reliance by governments on reports furnished by their own officers engaged in ordinary duties for certain types of information regard-

ing African institutions may lead to serious misunderstanding.¹ The appointment of committees, to advise on matters involving a knowledge of native law and custom, of which the members are people who have not previously concerned themselves with such subjects, has more than once failed to yield satisfactory results.² Governments have recognized the need for inquiry on the lines of social anthropology in some cases to the extent of directing their own administrative officers to devote their whole time to this purpose. The Government of Nigeria seconded Dr. C. K. Meek and Mr. P. A. Talbot, while in the Gold Coast the late Capt. R. S. Rattray made extensive studies. Administrative officers have devoted their whole time to investigating the question of land-tenure in the Sukuma country of Tanganyika and in the Yoruba country of Nigeria, where Mr. H. L. Ward Price completed a notable study in 1933.³ Many of the works mentioned in the bibliography at the end of this chapter are the results of work by government servants and of the official encouragement which they have received. So far as their immediate usefulness to governments is concerned, the inquiries carried out in this way in the Ibo country of Southern Nigeria and the pagan areas of Northern Nigeria probably constitute the most valuable anthropological work which has been done.

The administrative officer as an anthropological inquirer works, however, under certain disadvantages. His relations with Africans are apt to be coloured by the fact that he represents the government. On the West Coast his tour of service is so short as to result in very frequent changes of station, and there are few officers who have long knowledge of any one locality; in some districts the multiplicity of dialects creates an exceptional difficulty; and almost everywhere in Africa the present conditions involve a pressure of work which leaves little leisure for detached study. Even when the administrative officer is not at a disadvantage owing to lack of experience in the technique of investigation, he is often compelled to confine himself to the more immediate and obvious aspects of the subject into which he is inquiring, and is

¹ See above, pp. 40-1.

² B. Malinowski, 'Practical Anthropology', *Africa*, vol. ii, no. 1, 1929, p. 30.

³ *Land Tenure in the Yoruba Provinces*, 1933.

unable to consider its wider relations in the social or economic life of the community. When, therefore, inquiries on specific subjects have to be undertaken, with a view to action, the government officer with a training in anthropological methods is likely to prove a successful investigator, only provided that he is allowed to devote sufficient time to the purpose. The professional anthropologist should, however, be able to provide a more complete picture of a native society, and, in areas where native institutions are least understood, he is likely to be of great assistance in providing the government with the knowledge which must form the basis of administrative policy. In general, it may be said that governments are likely to derive the greatest advantage from inquiries undertaken by anthropologists in association with their own technical or administrative officers.

While the tendency of governments has been to leave to the non-official agencies, of which some details will be found below, the employment of trained anthropological inquirers, there are some instances in which they have given direct evidence of the value they have attached to their services.

An experiment in co-operation between an anthropologist and an administrative officer, undertaken at the suggestion of the Tanganyika Government, resulted in the publication of *Anthropology in Action* (1935), by Gordon Brown and Bruce Hutt. This undertaking is of interest as showing the range of subjects in which the data collected by a trained investigator are relevant to questions of practical administration. The administration of the Northern Territories of the Gold Coast has lately circulated, for the guidance of officers in hearing appeals, the information regarding marriage customs collected by a field-worker among the Tallensi.¹ The data obtained by an anthropological inquirer regarding the nature and amount of native diet was found to have significant implications for agricultural policy in Northern Rhodesia.² In Uganda an anthropologist joined with an officer of the Veterinary Department in the study of the possibilities of the development of stock-raising in the Ankole district, a problem in

¹ M. Fortes, *Marriage Law among the Tallensi*, 1937.

² A. I. Richards and E. M. Widdowson, 'A Dietary Study in North-eastern Rhodesia', *Africa*, vol. ix, no. 2, 1936, pp. 166-96.

which the social factors, due to the traditional attachment of the Hima to their cattle, were of first importance. In Bechuanaland the Board of Advice on Native Education includes among its personnel the Professor of Social Anthropology in the University of Capetown; and the Swaziland Administration recently invited several anthropologists to make recommendations regarding the adaptation of the regimental (*ibutho*) system to modern educational needs.¹

(d) *Government Officers' Note-books*

In the British territories *District Note-books*, or, as they are termed in some areas, *Political Note-books*, are to be found at each district head-quarters; in Tanganyika these are supplemented by *Provincial Note-books*. Besides current information of a statistical nature, the note-books contain records of local tribal history and custom, the family history and connexions of native authorities, and observations on cases heard on appeal or revision from native courts. There are, however, wide differences both in the system observed in keeping these records and in the value of the material they contain. The primary object is not a systematic statement of custom, but the recording of information which may prove useful in the work of administration. There is a similar system of note-books in the Belgian Congo, there termed *Registres de renseignements politiques*. These follow a prescribed model, which lays stress on the importance of inquiry as the basis for the reorganization recently undertaken of native administration areas; the records are consequently more systematically maintained than many of the British district note-books. No systematic record of this nature appears to be maintained in the French territories.

The knowledge of government officials in Africa constitutes a vast reservoir of detailed information regarding African institutions and the changes which they are undergoing, and it would greatly serve the interests both of governments and of anthropological science if this information could be placed on record. It is strongly to be recommended that the district note-books should be developed with this end in view. The mere recording of

¹ See, e.g., H. Beemer, 'The Development of the Military Organization in Swaziland', *Africa*, vol. x, nos. 1 and 2, 1937.

interesting events will constitute a record of local history which cannot be preserved in any other way, but if the officers in charge of the books can be encouraged to work on the principle that all information relating to native social institutions is capable, in certain circumstances, of being useful to governments, the books might become of greatly enhanced value. Officers who have the advantage of training in the outlook and technique of anthropology will be able to make the best use of the books, but if an inexpensive manual on this subject were compiled it might prove of assistance to officers in general.

One of the functions of the books should be to record references to cases in the high court, magistrates' courts, and native courts, which are of importance in revealing native custom. It is of importance that before the records of court cases are destroyed the notes relating to such cases should be consulted, in order that any records which are of value may be preserved. It must frequently happen that the bare record of evidence in a court file represents but a fraction of the knowledge which the proceedings bring to light, and in such circumstances the district books afford an opportunity for the administrative officer or the magistrate to amplify the record on the court file. Attention might also be directed to the connexion between the legal aspects of institutions, with which the court files are concerned, and the social aspects of those institutions. M. Brévié, lately Governor-General of French West Africa, indicated the value of studies of this nature in a circular of 1931.¹

It should, again, be an important function of the note-book to record the state of social institutions at moments of change. For instance, in the event of large new areas of land being brought under cultivation for a new food crop, it may later be of value to know what was the position regarding the ownership and use of that land before the change, and what differences in native diet and other habits follow the introduction of the new food crop. Indications of a changing outlook in Africans are also of special interest; such, for instance, as a claim to personal ownership of cattle being contested on the ground that the cattle are the property of a family group. Not only administrative officers, but

¹ *Circulaires sur la politique et l'administration indigènes en A.O.F.*, no. 128 A.P., p. 61.

officers of the technical departments may have much to contribute towards district books; nor should the assistance of Africans be excluded. The Tanganyika Government newspaper *Mambo Leo* has provided a medium through which literate Africans have been able to place on record some of the traditions of their tribes.¹ Editorial exigencies, however, usually make it necessary to abridge such writings, and it might often be worth while keeping the original draft in a district book.

It has been suggested that valuable comparative data could be obtained by collating the material preserved in district records, and several governments have considered the appointment of a special agency for this purpose. Professor Thurnwald in his study of cultural contacts in East Africa² has used material drawn from this source.

(e) *Institutions for Teaching and Research*

The Ethnological Society of London, founded in 1843, and the Anthropological Society of London, founded in 1863, were merged in 1871 in the Anthropological Institute of Great Britain and Ireland; this became the Royal Anthropological Institute in 1907. Its *Journal* dates from 1871, and its publication *Man* from 1900. The Royal African Society, founded in 1901 as a memorial to Mary Kingsley, publishes a quarterly journal which includes articles on anthropological subjects. There are Chairs of Social Anthropology at Oxford, Cambridge, and London, and a Chair of Geography and Anthropology at Aberystwyth. In Oxford a Lectureship in African Sociology was created in 1935. The University of Manchester has an honours school of Geography and Anthropology under the control of the Professor of Geography. The London School of Economics has made a special feature of the training of investigators. The courses of training provided at Oxford and Cambridge for officers appointed to the African Administrative Service include the study of anthropology.

The financial assistance of the Rockefeller Foundation made possible the establishment in 1926 of the International Institute

¹ N. Caxton Nunggla Mahenge, 'Habari za Nchi ya Bukwimba', *Mambo Leo*, March 1936; Aaron Paulo, 'Hadithi ya Sultani na Myware (Hadithi ya Kinyamwezi)', *ibid.*, April 1936; Marko Gwaja, 'Habari za Kale, Kabila la Ekoni', *ibid.*, June 1936.

² *Black and White in East Africa: The Fabric of a New Civilization*, 1935.

of African Languages and Cultures. It was originally intended to serve as a clearing-house for African information for the benefit of those engaged in official, missionary, or other work in Africa. In 1931, however, with the assistance of a further Rockefeller grant, it launched a five-year plan of research to be directed to the effect on African societies of their contact with European influences.¹ In furtherance of this plan it has made awards of two types—grants for study while on leave to officials or missionaries, and fellowships for full-time research to trained field-workers. Thirteen studentships of the first type have been awarded, while seventeen research fellowships have been held, fifteen for anthropological studies. In addition, thirteen grants have been given for part-time work or to complete special studies already begun.² The governing body of the Institute represents thirty-nine universities and learned societies in different countries, as well as the Catholic and Protestant missionary conferences; the Belgian, German, Italian, and South African governments and those of all the British and French African colonies contribute to its support, as does the International Missionary Council. Its journal, *Africa*, is a valuable source of information on the problem of culture contact in the different African territories.

Such field-work in social anthropology as has been carried out in Africa by British students during recent years has been financed largely by the Rockefeller Foundation and the International Institute of African Languages and Cultures. The former policy of the Rockefeller Foundation to include social anthropology among the subjects for which its social science fellowships were granted had an important influence on the development of studies by trained inquirers. Between 1924 and 1934, when the programme of fellowships for field research was suspended, fifteen were granted for research in Africa.

A project of co-operative research concerning Kenya is now in course of execution under the direction of the Oxford University Social Studies Research Committee which administers the grant made to the University by the Rockefeller Foundation for the promotion of research in the field of social studies. Two anthropo-

¹ See *Africa*, vol. v, no. 1, 1932, pp. 1-13.

² Annual Report for 1936, *Africa*, vol. x, no. 1, 1937, pp. 106-13.

logists, an expert on colonial administration, an economist, and a geographer are collaborating under the supervision of the professors of colonial history, social anthropology, and geography. The results will be embodied in a book which it is hoped will be published in 1940.

In addition to these sources, the more recently constituted Leverhulme Trust gives fellowships for research in all subjects; a number of these have been held by anthropologists,¹ but the majority outside Africa. Other endowments earmarked for anthropology are limited to two: the Anthony Wilkins Studentship, offered by the University of Cambridge for research in ethnology or archaeology, and the Tweedie Exploration Fellowship of the University of Edinburgh, which can only be held in Asia or North Africa.

In South Africa four universities—Capetown, Witwatersrand, Pretoria, and Stellenbosch—have departments of Bantu Studies:² Capetown has a Chair, and the Witwatersrand and Pretoria have Senior Lectureships in Social Anthropology. The Witwatersrand University publishes a quarterly, *Bantu Studies*, which was founded in 1923. An Inter-University Committee for African Studies was founded in 1932, and consists of representatives of all the South African universities, the Union Departments of Education and Native Affairs, the High Commission Administration, the Government of Southern Rhodesia, and the South African Missionary Conference. A Department of Social Anthropology and Native Law, under Z. K. Matthews, himself a South African native, was recently established at the South African Native College, Fort Hare.

The Capetown Chair and the Senior Lectureship at the Witwatersrand were endowed by a grant from the South African Government for the development of a School of African Life and Languages for the training of officials. For a few years a bonus of £50 a year was paid to officials who obtained a diploma in those subjects, but this has now been discontinued, and officials are not granted facilities to take courses in Bantu studies.³ The

¹ Miss M. M. Green and Mrs. S. Leith-Ross for field study of the Ibo in S.E. Nigeria.

² See Chap. XVIII, p. 1211.

³ Ibid., and Chap. IX, pp. 368-9.

Governments of Rhodesia and the High Commission Territories have, however, allowed their officials to attend vacation courses organized by the South African universities jointly. The Native Affairs Department in the Union has an ethnological section with an anthropologist in charge.¹ The South African Association for the Advancement of Science also publishes much anthropological material.

As already shown, administrative officers have in the past been seconded for anthropological work by the governments of several British colonial territories,² but it is understood that these appointments are not at present in existence except in the Gold Coast. Northern Rhodesia has lately obtained sanction for the creation of a post of government anthropologist in connexion with the proposed Rhodes-Livingstone Memorial Institute at Livingstone, in support of which an appeal was issued in 1937;³ an ordinance⁴ has been passed establishing a board of trustees for the management of the Institute under the direction of the government. An institution of this nature, situated in a central position in Africa, and equipped to carry out a continuous study of social conditions, will have unquestioned value. The Government of the Anglo-Egyptian Sudan financed the studies of Professor and Mrs. C. G. Seligman and later Dr. Evans Pritchard,⁵ and in 1937 appointed Dr. S. F. Nadel as government anthropologist to carry out a special survey of the Nuba hills. The Bechuanaland Protectorate commissioned a study by Professor I. Schapera of the native customary law of the various tribes.⁶ The Carnegie Corporation gives grants to officials from British territories to enable them to take courses of study while on leave, and the governments allow extension of leave for this purpose.

The Société d'Anthropologie de Paris, founded in 1859, issues a series of bulletins and memoirs, and the Société d'Ethnographie, founded in the same year, issues a bulletin. The *Revue anthropologique* is the organ of the Institut International d'Anthropologie,

¹ H. Rogers, *Native Administration in the Union of South Africa*, 1933, pp. 250-2.

² See p. 47.

³ *The Times*, June 30, 1937.

⁴ Rhodes-Livingstone Institute Ordinance, no. 1 of 1937.

⁵ See H. MacMichael, *The Anglo-Egyptian Sudan*, 1934, p. 267.

⁶ I. Schapera, *Handbook of Tswana Customary Law*, 1935, MS. (cyclostyled for private circulation).

whose head-quarters are at the École d'Anthropologie, and which, since 1926, has published a series of *Travaux et mémoires*, many of which deal with Africa. The Société des Africanistes, founded in 1931 for the scientific study of Africa and its peoples, publishes a *Journal* which contains many anthropological studies. Courses in ethnology are given at the Institut d'Ethnologie, attached to the Sorbonne and subsidized by the Ministry for the Colonies, and the Faculty of Law of the University of Paris includes a section on ethnological jurisprudence directed by the Professor of Colonial Legislation, M. René Maunier, whose studies of the sociology of Algeria are well known. Students of the École Coloniale attend lectures in colonial history, ethnology, and customary law. It has for some time been considered necessary to increase the facilities for training in order that they should not be confined to officials of the higher grade, and it is understood that a Colonial University for this purpose may be established shortly at Vincennes. A commission, consisting of members of the legislature and experts, has recently been appointed to make a wide survey of native societies in the French colonial territories.¹

The Société d'Anthropologie de Bruxelles, founded in 1882, issues bulletins and memoirs. The Musée du Congo Belge has published a series of studies, beginning in 1902, of the peoples represented in its collections. The state Universities of Ghent and Liège give general courses in anthropology in the Faculty of Science, and courses referring specially to the Congo in the Department of Commerce. The University of Louvain gives courses in anthropology and native administration for missionaries, agricultural experts, and other candidates for the degree in colonial science. The school of political and social sciences of the University of Brussels includes anthropology among its subjects. Administrative officials of the superior grade undergo a training of four years at the Colonial University of Antwerp, which includes a detailed study of the anthropology of the Congo; a course of five months in this subject is also obligatory for all candidates for any of the colonial services who have not undergone the university training. Elementary instruction of the same type is given at the

¹ See Chap. VI, p. 188.

agricultural institutes of Gembloux, Ghent, and Louvain, in connexion with the courses on tropical agriculture.

In Germany the Berliner Gesellschaft für Anthropologie has, since 1869, published the *Zeitschrift für Ethnologie*, and the *Zeitschrift für vergleichende Rechtswissenschaft*, first published in Berlin in 1895, devotes much attention to problems of primitive law; there are Chairs of Anthropology at Berlin, Hamburg, Göttingen, Cologne, Leipzig, and Munich. There are schools for the training of intending settlers and their wives, which give elementary instruction in anthropology; of these the most important are at Witzenhausen for men and at Sonderburg for women.

In the United States a growing number of anthropologists, among them M. J. Herskovits, of the Northwestern University, are turning their attention to African studies. The Universities of Harvard, Columbia, and Pennsylvania, and the Northwestern University, have given fellowships for research in Africa, and Harvard has published a series of African Studies, initiated in 1917. There is a growing interest in the United States in research into the cultures of the negroes of America, and field-work has been done in connexion with the relation of these cultures to those of West Africa.

(f) *The Future of Anthropological Inquiries*

From the scientific, as well as from the practical, point of view there may be doubt whether the existing organization of the field inquiries now being undertaken in Africa is such as to secure the best results from the available resources. In the case of the work financed by the Rockefeller Foundation,¹ either directly or through the International Institute of African Languages and Cultures, there has been a certain co-ordination in the general lines of research undertaken, owing to the fact that most of the investigators were trained at one centre; but, although the method of inquiry has been based on common principles, the selection of problems for study has been left largely to different investigators, who have published their results mainly in the form of monographs on a restricted area. While undoubtedly the material collected provides the basis for comparative studies of native society in different parts

¹ See above, p. 52.

of Africa, such as have not hitherto been possible, no study of this kind has been attempted through a centrally controlled body which would concentrate upon the investigation either of a group of closely similar peoples, or of some particular institution, or of a special aspect of African life, such as its economic organization. In consequence, there appears to be a dispersion of energy. It is clear that a complete investigation of every African tribe is impossible; but if an intensive study, arranged on a concerted plan, were made of three or four important tribes in every territory, the results would have a value extending beyond the immediate field of study, and would compensate more amply for the cost of research.

It would facilitate the effective co-ordination of official and private inquiries, with great advantage to both, if those bodies in Europe and America which promote anthropological work would relate their policy to the practical needs of governments. It is also of importance that facilities should be provided at the universities, and in the form of manuals on technique, for government officers to be trained in anthropological investigation, both during the courses which they take before entering upon their appointments and subsequently when they are on leave. It is significant that the South Africa Native Economic Commission made a recommendation to the Union Government that

'it will be necessary to devote more attention to the scientific study of the natives than has hitherto taken place. The universities have for some time devoted their attention to this subject, and a good deal of investigation has taken place by private research. Your Commission considers that greater encouragement should be given to such work, and that steps should be taken to facilitate co-operation between officials dealing with natives and scientific investigators, to enable the results of such work to be used to assist in dealing with administrative questions dependent on a knowledge of native customs.'¹

If, however, governments are to take a more direct part in supporting sociological inquiry in Africa, they are likely to feel that certain conditions should be observed. They may claim that work undertaken with their support should pay predominant attention to points to which they themselves attach significance.

¹ *Report*, U.G. 22, 1932, para. 249.

It is true that in the social, as in the natural sciences, it is not possible to demand that only those phenomena should be investigated the study of which can be shown to have some practical relevance; the knowledge which is of real value comes from the application to specific problems of the results of general research. In the case of anthropology it is particularly necessary to realize that the intensive studies which have been described¹ represent a valuable preliminary to any special investigation of particular aspects of native life which present immediate problems of policy; but while no government could reasonably seek to prescribe the precise range which an investigator's inquiries should take, it may, with some reason, require that he should endeavour to throw all possible light on the problems which it selects as being of practical importance.

It would not be difficult to suggest numerous cases in which the assistance of an anthropologist would be of value.² The question of malnutrition has, for instance, recently attracted world-wide attention. There is now under discussion³ a plan for a joint investigation of the diet of some typical tribes in East Africa in which an anthropologist, a biochemist, a medical man, and an agriculturist would take part. A complete study of diet involves not only data as to quantities produced and consumed and their food values but also data as to the methods and customs connected with cooking, brewing, milking, slaughtering, eating, and drinking, including food taboos. Again, any inquiry into the possibility of making agricultural improvements must have its sociological aspect, involving the law of land-tenure, the system of co-operation in production, and the incentive to increased production, whether this lies in the direct desire to accumulate food, the need to meet some obligation, or the possibility of earning money.⁴ In the chapter relating to population records⁵ reference is made to the need for a more systematic collection of vital statistics; but it would not be possible to interpret correctly the material

¹ See above, pp. 42-5.

² See Chap. XVI, pp. 1106 ff.; Chap. XVII, pp. 1122-4.

³ See International Institute of African Languages and Cultures, Annual Report for 1937, *Africa*, vol. xi, no. 1, 1938, p. 92.

⁴ See International Institute of African Languages and Cultures, Annual Report for 1936, *Africa*, vol. x, no. 1, 1937, pp. 109-10.

⁵ See Chap. IV, pp. 103-4.

thus provided without knowing the demographic effect of certain social customs. It is, for instance, important to know whether taboos on sexual intercourse over long periods limit the possibility of conception, whether abortion is practised, by what means and for what reasons, whether infanticide is, or has recently been, a custom; while the relation between customs permitting sexual freedom, the break-down of the limitations on such freedom, and the control of venereal disease is also important. The problem of soil erosion,¹ particularly in South and East Africa, is in great part attributable to over-stocking: but in seeking a solution it is necessary to take account of the importance attached to cattle in the light of the religious beliefs and ceremonies involving them, and, above all, the effect of the payment of bride-price in maintaining respect for marriage and kinship obligations.²

(g) Bibliography

For convenience of reference, a bibliography of some of the principal contributions to the study of social anthropology in Africa is given below.

The journals published by learned societies have been mentioned in sect. (e).

A number of governments finance journals which deal with subjects of local interest, including accounts of native tribes, e.g. *Nada*, the Native Affairs Department Annual of Southern Rhodesia; *Tanganyika Notes and Records*; *The Gold Coast Review*; *Bulletin du Comité d'Études Historiques et Scientifiques de l'Afrique Occidentale Française*; the monthly journal *Congo*; and *Ethnological Publications*, a series issued by the Union Department of Native Affairs. Material is to be found in the reports of agricultural and health officers, and in the proceedings of committees appointed to consider land questions and labour conditions. The most valuable of the special reports made on the subject of land tenures, in the light which they cast on the social system, are those relating to the Kikuyu in Kenya and the Yoruba in Nigeria.³ Reference is made to such material in the appropriate chapters throughout this Survey.

SOUTH AFRICA

The South African Inter-University Committee for African Studies published a general review of the work done in South Africa in *Bantu*

¹ See Chap. XVI, p. 1069.

² See L. S. B. Leakey, 'Goats and Sheep in the Social Life of the Kikuyu', *Journal of the African Society*, vol. xxxiii, no. cxxx, 1934, pp. 70-9.

³ See Chap. XII, pp. 849 and 854.

Studies, vol. viii, no. 3, 1934. It is responsible for the publication of *The Bantu-Speaking Tribes of South Africa*, 1937, edited by I. Schapera.

H. A. Junod, *The Life of a South African Tribe*, 1912; this description of the Tonga, both in South African and Portuguese territory, is the result of a close investigation of certain aspects of culture, such as kinship, marriage customs, and magic.

H. Callaway, *The Religious System of the Amazulu*, 1870; most valuable of the older works on the Zulu.

M. M. Fuze, an African, *Abantu abamnyama, lapa Cavela ngakona*, 1922; a history of the Zulu in the vernacular.

S. T. Plaatje, an African, *Sechuana Proverbs*, 1916; a collection of texts.

W. B. Rubusana, an African, *Zemk' Inkomo, Magwalandini*, 1906; a collection of Ngoni phrases and proverbs with notes on customs and history.

Z. D. Mangoaela, an African, *Lithoko tsa Marena a Basotho*, 1921; a collection of phrases.

A. Sekese, an African, *Mekhoa le Maele a Ba Sotho*, 1907; a collection of laws and proverbs.

H. A. Stayt, *The Bavenda*, 1931.

J. H. Soga, an African, *The Amaxosa: Life and Customs*, 1932; the most recent work on the Southern Ngoni.

J. E. Casalis, *Les Bassoutos*, 1861; there is nothing more recent on the Basuto.

Mrs. A. W. Hoernlé, 'Social Organization of the Nama Hottentots of South-West Africa,' *American Anthropologist*, vol. xxvii, 1924; the most valuable account of the Namaqua.

H. Vedder, *Die Bergdama*, 1923.

E. Fischer, *Die Rehobother Bastards und das Bastardierungsproblem beim Menschen*, 1913.

H. Beemer, 'The Development of the Military Organization in Swaziland', *Africa*, vol. x, nos. 1 and 2, 1937.

I. Schapera, *The Khoisan Peoples of South Africa; Bushmen and Hottentots*, 1930, and E. J. Krige, *The Social System of the Zulus*, 1936; in these volumes trained anthropologists have collated existing records.

I. Schapera, 'The Old Bantu Culture' and 'Present Day Life in the Native Reserves', in *Western Civilization and the Natives of South Africa*, 1934; articles on modern developments, especially among the Kxatla of Bechuanaland. *Handbook of Tswana Law and Custom*, 1938.

M. Hunter, *Reaction to Conquest: Effects of Contact with Europeans on the Pondo of South Africa*, 1936.

SOUTHERN RHODESIA

C. Bullock, *The Mashona*, 1928; deals in particular with the legal aspects of local customs; there has been no special inquiry by an anthropologist.

NORTHERN RHODESIA

J. Moffat Thomson and W. G. Fairweather, *Memorandum on the Tribal Areas in Northern Rhodesia*, 1934; E. M. Lane Poole, *The Native Tribes of the East Luangwa Province of Northern Rhodesia*, 1934; these are official works published by the government: the latter is mainly historical.

E. W. Smith and A. M. Dale, *The Ila-speaking Peoples of Northern Rhodesia*, 1920; of high standard.

C. M. Doke, *The Lambas of Northern Rhodesia*, 1931.

A. I. Richards, 'Tribal Government in Transition', Supplement to the *Journal of the Royal African Society*, vol. xxxiv, no. cxxxvii, 1935; 'A Modern Movement of Witch-finders', *Africa*, vol. viii, no. 4, 1935; 'A Dietary Study in North-Eastern Rhodesia' (with E. M. Widdowson), *Africa*, vol. ix, no. 2, 1936.

NYASALAND.

A. G. O. Hodgson, 'Notes on the Angoni and Achewa of Dowa District', *Journal of the Royal Anthropological Institute*, vol. lxiii, 1933.

T. Cullen Young, *Notes on the Customs and Folklore of the Tumbuka-Kamanga Peoples*, 1931; the most important work on Nyasaland.

TANGANYIKA.

There are numerous works in German on individual tribes, including O. Dempwolff, *Die Sandawe*, 1916; H. Claus, *Die Wagogo*, 1911; M. Merker, *Die Masai*, 1904; H. Rehse, *Kiziba, Land und Leute*, 1910; A. Eichhorn (Editor), *Beiträge zur Kenntnis der Waschambaa*, 1911-24; E. Nigmann, *Die Wahehe*, 1908, and a collection of texts by W. Blohm, published under the title *Die Nyamwezi*, 1931.

Das Eingeborenennrecht, 1929, is a study in 2 volumes, edited by B. Ankermann. It carried out a project, made some years before the War, for the study of native law. It is based on questionnaires circulated to missionaries and others in the former German colonies in Africa and elsewhere.

B. Gutmann, *Das Recht der Dschagga*, 1928; this is one of the fullest studies so far published of any African culture; the fruit of long acquaintance with the Chaga as a missionary. *Die Stammeslehren der Dschagga*, 1932, also by Gutmann, is a collection of the formulae used at initiation ceremonies.

C. Dundas, *Kilimanjaro and its People*, 1924, writes in amplification of Gutmann's researches.

R. Thurnwald, *Black and White in East Africa*, 1936, is a survey of the process of culture contact among the principal tribes of Tanganyika. The results of the study by Mrs. Thurnwald on the position of women are summarized in one chapter. They have been published in full in German, *Die schwarze Frau im Gestaltwandel Afrikas*, 1935.

G. G. Brown and A. McD. B. Hutt, *Anthropology in Action*, 1935; an example of co-operation between an anthropologist and a government officer; refers to the Hehe tribe.¹

A. T. and G. M. Culwick, *Ubena of the Rivers*, 1935, is a valuable study by a District Officer and his wife.

KENYA

G. Lindblom, *The Akamba in British East Africa*, 1920.

C. W. Hobley, *Ethnology of the A-Kamba, and other East African Tribes*, 1910, and *Bantu Beliefs and Magic*, 1922; the latter refers to the Kikuyu.

W. S. and K. Routledge, *With a Prehistoric People*, 1910; also deals with the Kikuyu.

A. C. Hollis, *The Masai: their Language and Folklore*, 1905, and *The Nandi: their Language and Folklore*, 1909.

G. St. J. Orde Browne, *The Vanishing Tribes of Kenya*, 1925, deals with the minor tribes of the Kikuyu district.

W. M. H. Beech, *The Suk*, 1911.

J. A. Massam, *The Cliff Dwellers of Kenya*, 1927; refers to the Elgeyo tribe.

L. S. B. Leakey, 'Goats and Sheep in the Social Life of the Kikuyu', *Journal of the Royal African Society*, vol. xxxiii, no. cxxx, 1934, pp. 70-9.

UGANDA

J. Roscoe, in *The Baganda*, 1911, made an extensive and valuable, if not entirely systematic, collection of material on the Ganda people. *The Bakitara or Banyoro*, 1923, and *The Banyankole*, 1923, by the same author, are of less value (vide H. B. Thomas and R. Scott, *Uganda*, 1935, p. 85, note 1).

J. H. Driberg, *The Lango*, 1923.

L. P. Mair, *An African People in the Twentieth Century*, 1933. These last two books follow modern methods of research.

NIGERIA

C. K. Meek, *A Sudanese Kingdom*, 1931; is a study of the Jukun by a government anthropologist. His *Law and Authority in a Nigerian Tribe*, 1937, is an important work dealing with the Ibo. The same author's 2 volumes on *Tribal Studies in Northern Nigeria*, 1931, contain reports on upwards of fifty tribes, which vary in completeness with the time that could be devoted to them. He also made a general survey of the peoples of the Northern Provinces in connexion with the 1921 census, *The Northern Tribes of Nigeria*, 1925, 2 volumes.

P. A. Talbot, another government anthropologist, has similarly covered the Southern Provinces in *The Peoples of Southern Nigeria*, 1926, 2 volumes, *Nigerian Fertility Cults*, 1927, and other works.

The Tiv People, 1933, by R. C. Abraham, and *The Tiv Tribe*, 1933,

¹ See above, p. 48.

by R. M. Downes, are based on reorganization reports by the authors and other officers. Special interest attaches to the intelligence reports which formed the basis of the reorganization of the pagan areas in Northern Nigeria and in some of the South-Eastern districts. Some of the latter, prepared between 1930 and 1934, were confined to a summary investigation of social grouping and the distribution of judicial and executive functions (see M. Perham, *Native Administration in Nigeria*, 1937, p. 221), but others, conducted by officers who have had long experience of their districts, are very thorough.

J. R. Wilson-Haffenden, *The Red Men of Nigeria*, 1930; describes the nomad Fulani.

A. J. N. Tremearne, *Tailed Head-Hunters of Nigeria*, 1912; refers to the Hausa and other tribes.

S. F. Nadel, 'Witchcraft and Anti-Witchcraft in Nupe Society', *Africa*, vol. viii, no. 4, 1935, pp. 423-47; 'Nupe State and Community', *Africa*, vol. viii, no. 3, 1935, pp. 257-303; 'Gunnu; a Fertility Rite', *Journal of the Royal Anthropological Institute*, vol. lxvii, part 1, 1937. Both the last article and a forthcoming book are based on recent research by a trained anthropologist.

C. Daryll Forde, 'Land and Labour in a Cross River Village, Southern Nigeria', *Geographical Journal*, vol. xc, no. 1, 1937; and 'Social Change in a West African Village Community', *Man*, January 1937, pp. 10-12; these are the result of modern research into the legal systems and economic organization of a Southern Nigerian village.

S. Leith-Ross, 'Notes on the Osu system among the Ibo of Owerri Province', *Africa*, vol. x, no. 2, 1937; *African Women: A Study of the Ibo of Nigeria*, to be published in 1939, results of the studies of a Leverhulme Trust Fellow.

S. Johnson, an African, *History of the Yorubas*, 1921.

GOLD COAST

C. C. Reindorf, an African, *History of the Gold Coast*, 1895.

J. M. Sarbah, an African, *Fanti Customary Laws*, 1897.

J. B. Danquah, an African, *Akan Laws and Customs*, 1928.

R. S. Rattray, government anthropologist, has published *Ashanti*, 1923, *Religion and Art in Ashanti*, 1927, *Ashanti Law and Constitution*, 1929, *Tribes of the Ashanti Hinterland*, 1932, *Hausa Folk-lore*, 1913.

A. W. Cardinall, also a government officer, *The Natives of the Northern Territories of the Gold Coast*, 1921.

M. and S. L. Fortes, 'Food in the Domestic Economy of the Tallensi', *Africa*, vol. ix, no. 2, 1936, pp. 237-76; M. Fortes, 'Culture Contact as a Dynamic Process—an Investigation in the Northern Territories of the Gold Coast', *Africa*, vol. ix, no. 1, 1936, pp. 24-55. These articles give the results of recent research by a trained inquirer.

M. J. Field, *Religion and medicine of the Gã People*, 1937.

TOGOLAND

J. Spieth, *Ewe-Stämme*, 1906; a collection of texts on native institutions.

LIBERIA

D. Westermann, *Die Kpelle, ein Negerstamm in Liberia*, 1921; a study of a Liberian tribe.

SIERRA LEONE

S. Hofstra, 'Personality and Differentiation in the Political Life of the Mendi', *Africa*, vol. x, no. 4, 1937, pp. 436-57. The result of recent research by a trained inquirer.

FRENCH WEST AFRICA

M. Delafosse, *Haut-Sénégal-Niger*, 1912, is based on the results of an inquiry carried out in 1909 with a view to the preparation of a general code of civil law for the use of the courts dealing with native cases. In the French colonies attention has been directed principally to legal studies of this nature. In 1905 the Governor-General issued a circular calling on officials to study native customs with a view to the compilation of a code of civil law. A study of the Islamic tribes was set on foot immediately after the War.

J. Brévié, lately Governor-General, *Circulaires sur la politique et l'administration indigènes*, 1931, p. 61, mentions a number of other studies, general or devoted to special branches of custom, but describes them as 'fragmentary'. He urged a more energetic application to the subject. As a result of the stimulus given by him, studies have appeared in the local *Bulletin du Comité d'Études Historiques et Scientifiques de l'A.O.F.*

L. Geismar, *Recueil des coutumes civiles des races du Sénégal*, 1933, is the first completed study of the customary law of a colony.

H. Labouret, French Director of the International Institute of African Languages and Cultures, 'Les Tribus du Rameau Lovi', *Travaux et mémoires de l'Institut d'Ethnologie*, no. xv, 1931, a study of the Lovi based on the observations of eleven years spent among them; *Les Manding et leur langue*, 1934, a manual of information and guidance for officials; *Les Bobo*, 1924, two volumes of texts on the Bobo of the Upper Volta, dealing with social life and religion, collected by Dr. Cremer and edited by M. Labouret.

J. R. Rodd, *People of the Veil*, 1926; describes the Tuareg.

L. Tauxier, *Le Noir de Bondoukou*, 1921, 2 volumes; *Nègres Gouro et Gagou*, 1924, a study of the Ivory Coast tribes.

C. Monteil, *Les Khassonké*, 1915, and *Une Cité soudanaise, Djénné*, 1932.

J. H. Saint-Père, *Les Sarakolles du Guidimakhé*, 1925.

A. Le Hérissé, *Ancien royaume du Dahomey*, 1911; the principal work on Dahomey.

Dim Delobsom, *L'Empire du Mogho-Naba*, 1933; a volume on the Mossi by an African.

M. J. Herskovits has recently carried out an investigation in Dahomey, and has published some preliminary material; 'Outline of Dahomean Religious Belief', *Memoirs of the American Anthropological Association*, no. 41, 1933; 'A Note on "Woman Marriage" in Dahomey', *Africa*, vol. x, no. 3, 1937, pp. 335-41.

FRENCH EQUATORIAL AFRICA.

General surveys have been made, but there is as yet no monograph devoted to a single tribe.

CAMEROONS.

E. Pechuël-Loesche, *Volkskunde von Loango*, 1907.

G. Tessmann, *Die Pangwe*, 1913; and *Die Bafia und die Kultur der Mittelkamerun-Bantu*, 1934.

BELGIAN CONGO.

Particular attention has been given, above all by the judiciary, to the study of native law. The Institut Royal Colonial Belge offers prizes annually for essays on matters of colonial interest, and the questions set in the anthropological section usually deal with some aspect of customary law. Subjects for 1938 were the rules of succession, the system of customary tribes, and the influence of Belgian colonization upon their payment (*Congo*, June 1936, pp. 83-4).

A. Sohier, Procurator-General at Elizabethville, *Pratique des juridictions indigènes*, 1932; a pamphlet for the guidance of officials presiding over native courts. He edits a review, *Bulletin des juridictions indigènes et du droit coutumier*.

Two commissions, appointed in 1924 and 1930 to inquire into the effect on native life of the migration of labour,¹ brought to light data which are valuable as a preliminary to intensive research.

The inquiries of the Foréami medical organization have made a contribution of interest on the demographic aspect of certain customs.²

C. G. F. Delhaise, *Les Wariga*, 1909; J. Halkin, *Les Ababua*, 1911; C. Van Overbergh, *Les Basonge*, 1909; *Les Mayembe*, 1907; J. Van den Plas, *Les Kuku*, 1910; L. R. P. Colle, *Les Baluba*, 1913. These six studies follow a uniform plan, based on a questionnaire issued by the Société Belge de Sociologie.

J. Van Wing, *Études Bakongo*, 1921.

J. H. Weeks, *Among Congo Cannibals*, 1913; *Among the Primitive Bakongo*, 1914.

E. Torday and T. A. Joyce, *Les Bushongo*, 1910.

E. Verhulpen, *Baluba et Balubaïses du Katanga*, 1936.

¹ See Chap. XI, pp. 645 and 647.

² See Chap. IV, p. 121.

G. Van der Kerken, *Sociétés Bantoues du Congo Belge*, 1920, points out instances in which policy has failed to make due allowance for African custom.

P. Schebesta, *Bambuti, Die Zwerge vom Kongo*, 1932; *Der Urwald ruft wieder*, 1935; R. P. Trilles, *Pygmées de la forêt équatoriale*, 1932. The three last-mentioned books refer to the forest pygmy tribes.

RUANDA-URUNDI.

H. Meyer, *Die Barundi*, 1916.

J. Czechanowski, *Forschungen im Nil-Kongo Zwischengebiet*, 5 volumes, 1917-27.

N. de Cleene, 'Les Chefs indigènes au Mayombe', *Africa*, vol. viii, no. 1, 1935, pp. 63-75; 'La Famille dans l'organisation sociale du Mayombe', *Africa*, vol. x, no. 1, 1937, pp. 1-15.

PORTUGUESE EAST AFRICA.

E. D. Earthy, *Valenge Women*, 1933.

ANGOLA.

W. D. Hambly, *The Ovimbundu of Angola*, 1924; deals mainly with material culture.

COMPARATIVE STUDIES.

There are not many studies which treat the same aspect of African life as it appears in different tribes.

W. C. Willoughby, *The Soul of the Bantu*, 1928; *Nature Worship and Taboo*, 1932; these books deal with religious beliefs and rites in South and East Africa.

A. I. Richards, *Hunger and Work in a Savage Tribe*, 1932; deals with food, and the part played by its production and consumption, in South and East Africa.

E. E. Evans Pritchard, *Witchcraft, Oracles and Magic among the Azande*, 1937; refers to the Anglo-Egyptian Sudan, but deals with a sociological phenomenon of importance throughout Africa.

Africa, vol. viii, no. 4, 1935, was devoted to the subject of witchcraft. It included a number of articles referring to individual tribes, which have been noted above; also articles on 'Witchcraft', by E. E. Evans Pritchard, 'Witchcraft and British Colonial Law', by G. St. J. Orde Browne, 'Witchcraft and Colonial Legislation', by C. Clifton Roberts, and 'Ethical and Political Aspects of African Witchcraft', by F. Melland.

The problem of culture contacts has similarly received attention in *Africa*, on a scale which embraces many tribes: A. I. Richards, 'Anthropological Problems in North-Eastern Rhodesia', vol. v, no. 2, 1932, pp. 121-45, and 'The Village Census in the Study of Culture Contact', vol. viii, no. 1, 1935, pp. 20-33; M. Hunter, 'Methods of Study of Culture

Contact', vol. vii, no. 3, 1934, pp. 335-50; L. P. Mair, 'The Study of Culture Contact as a Practical Problem', vol. vii, no. 4, 1934, pp. 415-22; A. T. and G. M. Culwick, 'Culture Contact on the Fringe of Civilization', vol. viii, no. 2, 1935, pp. 163-70; I. Schapera, 'Field Methods in the Study of Modern Culture Contacts', vol. viii, no. 3, 1935, pp. 315-28; M. Fortes, 'Culture Contact as a Dynamic Process', vol. ix, no. 1, 1936, pp. 24-55; G. Wagner, 'The Study of Culture Contact and the Determination of Policy', vol. ix, no. 3, 1936, pp. 317-31.

E. W. Smith, *The Golden Stool*, 1926; a general survey of the results of European contact on native societies.

D. Westermann, German Director of the International Institute of African Languages and Cultures, *Africa and Christianity*, 1937, and *The African To-day*, 1934.

In 1930 the co-operation of government officers, missions, and certain European residents was sought by a Committee on the Human Geography of Inter-Tropical Africa constituted by the British Association for the Advancement of Science. It expressed the view that in anthropological studies 'the relationship of people to country is almost universally missing' (*The Human Geography of Inter-Tropical Africa*, 1930), and called attention to the need for showing how the environmental factors of climate, soil, and the like, condition the lives of African societies. A list of nineteen questions was circulated to governments. A number of replies was received; the accounts of the Mlanje District of Nyasaland by L. H. L. Foster, and the Kasulu District of Tanganyika by E. A. Leakey and N. V. Rounce, were published in *Geography* in 1932 and 1933 respectively. The Government of Northern Rhodesia invited all its district officers to answer the questionnaire, and the whole of this territory has been covered by a series of thirty-three reports. Their results were summarized by Professor A. G. Ogilvie, the Chairman of the Human Geography Committee, in his presidential address to the Geography Section of the British Association in September 1934. Studies based on the questionnaire were made by S. J. K. Baker, of the Geography Department of the University of Liverpool, on the Ankole District of Uganda and the South Nyeri District of Kenya, in the course of a four months' tour of East Africa. Such surveys are comparable with the survey work of the early anthropologist, but the method of circulating questionnaires to observers who may not have given much previous thought to the subject of inquiry, and lack the context of knowledge in which it was drafted, has serious disadvantages.

CHAPTER III

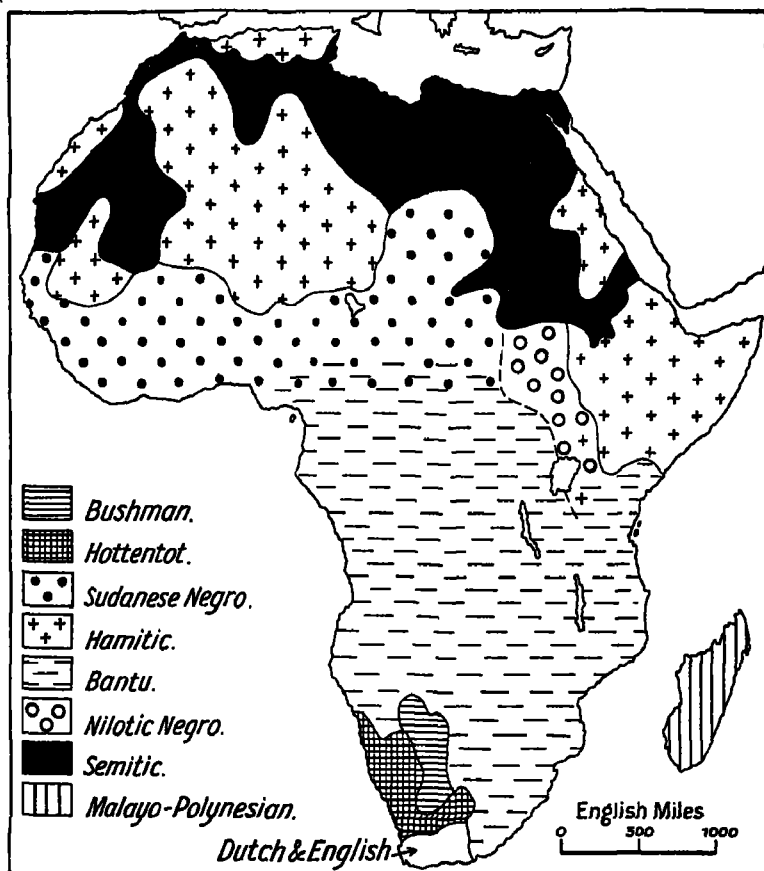
THE STUDY OF THE AFRICAN LANGUAGES

I. INTRODUCTION

THE exact number of the languages spoken in Africa is not known, but it is customary to speak of them as numbering 700. The first impulse to their study came from the need felt by missionary bodies for means of preaching to Africans in their own tongue and for making translations of the Bible. They encountered the difficulties inherent in research into the language of illiterate peoples; not only must the student dispense with the assistance from documents that is available in the case of languages which have been reduced to writing, but his task includes, in addition to analysis and translation, the devising of a system of transcription which will at the same time convey pronunciation and structure to persons to whom the language is unfamiliar, and be capable of manipulation by the native who is to be taught to read and write his own tongue. Despite these difficulties, between two and three hundred African languages have been reduced to writing by missions,¹ and some of the best work of a scientific nature has been done by missionaries.

The second stage began with the acceptance by missions and later by governments of an increasing measure of responsibility for education, and the assignment to African languages—both as medium and subject—of a place in schemes of popular instruction. A period of intensive philological study, associated with the work of scholars such as Alice Werner, Kropf, Bleek, Meinhof, and Westermann, linked the two stages. The publications of these scholars laid the foundations upon which the study of African languages could be based. This development created a series of new problems in linguistic study and educational policy. The impossibility of giving education in every one of the 700 vernaculars raises the question as to which should be chosen for this purpose and consequently in which school-books should be produced and original literature encouraged. In some areas the question has solved

¹ In the Editorial Report of the British and Foreign Bible Society issued in 1938, the number of publications in African languages is given as Bibles 33, New Testaments 70, Portions 173—a total of 276.



PRINCIPAL LANGUAGE GROUPS

Based on a map in Mr. Walter Fitzgerald's AFRICA by kind permission of Messrs. Methuen

itself by the early translation of the Bible in one dialect, which has thus acquired the prestige of a literary language. Some territories have adopted a current African lingua franca, others have selected for school use languages understood over the widest possible area, and in a few cases 'union' languages have been constructed for various dialect groups. In this last method, instead of choosing one dialect out of each group to predominate, an effort is made to construct a common language for the group by employing forms which are common to all the variants, or, where this is not possible, by the use of forms common to a predominant majority.¹ Schemes of this kind are detailed under the heading of the areas in which they occur.

The growth of a literate African population creates a demand for vernacular newspapers and makes possible the recording of the deliberations of native councils, the publication of rules and decisions of native authorities, and the communication in print of government orders and of popular interpretations of official policy, such as are circulated at present in the vernacular newspapers published by one or two administrations. Towards the creation of a literate population, grammars and text-books suitable for the African pupil must be devised and general literature is needed if the habit of reading is to be kept up when the pupil has left school.² This may be provided in the form of translations of European works, but it is also necessary that vernacular literature should grow up, and native pioneers in such a new method of expression need assistance and encouragement. That the supply of suitable reading material either for school or general use is wanting is illustrated by the report for 1935-6 of the Gold Coast Education Department, where it is stated that the vernacular receives scant attention in senior classes because of the lack of written material; and this is one of the most advanced colonies so far as education is concerned. Mention may be made, however, of the stimulus given to African writers by the annual competitions of the International Institute of African Languages and Cultures, and by an interterritorial Swahili essay competition, which have been both popular and successful.

Distribution of vernacular literature in tropical Africa is largely

¹ G. P. Lestrade, 'Some Reflections on the Future of South African Bantu Languages', *The Critic*, vol. iii, no. 3, 1934, p. 137.

² See Chap. XVIII, pp. 1257-9.

under the control of missionary bodies which have created book-shops and book depots. The C.M.S. Bookshop at Lagos, with its auxiliary depots, dealing with secular as well as religious literature, is one example of a large book-distributing agency under mission auspices. Mission printing-presses in Africa and religious publishing houses in Great Britain print a considerable amount of the vernacular literature issued.¹ A bibliography of African Christian literature, and a supplement, published respectively in 1923 and 1927, list religious and secular books in over 200 African languages. Following on this survey the International Missionary Council set up the International Committee on Christian Literature for Africa in 1929. This committee supplies information on literature through its quarterly bulletin, *Books for Africa*, and assists in the co-ordination of advance plans and in procuring and arranging for the publication of manuscripts. Improvements in transport are making possible the setting up of language and literature committees in different language areas and thus facilitating the co-operation of different workers, which is necessary for the successful production of books. These committees are noted later in this chapter under each special area.

It will be convenient to give, first, some account of the institutions now existing for the study and teaching of languages. This will be followed by a study of the present state of knowledge regarding the classification of the African tongues. There will next be given some information regarding the progress made in pursuing the study of one of the most important of the new problems which have arisen—namely, that of orthography—and a summary of the action taken in regard to the study and use of the vernaculars in each of the territories.

II. INSTITUTIONS FOR THE STUDY AND TEACHING OF AFRICAN LANGUAGES

The principal institutions are:

Austria. Institut für Ägyptologie und Afrikanistik an der Universität Wien, Vienna: Berber dialects, Kanuri, Swahili, Ful, and Nubian dialects.

¹ See Chap. XVIII, pp. 1293-7.

Belgium. Université Coloniale de Belgique, Antwerp: Bantu linguistics and Swahili.

Université de Louvain: Swahili, Ngala, Luba.

France. École Nationale des Langues Orientales Vivantes, Paris: Berber, Amharic, other Abyssinian languages, Ful, Mandingo, Sudanese languages, West African languages, Malagasy.

The Collège de France, Paris, the École Nationale de la France d'Outremer, and the Institut Colonial et Agricole at Nancy, have a course in Arabic.

Germany. Seminar für Orientalische Sprachen an der Universität Berlin: general problems of African linguistic research, general courses in African languages, Bantu grammar and phonetics, Arabic, Amharic, Tigrinya, Swahili, Comoro languages, Ewe, Hausa, Yaunde.

Seminar für Afrikanische und Südseesprachen, Hamburg: Ethiopic, Amharic, Tigre, Tigrinya, Galla, Somali, Hausa, Nama, Ful, Konde, Herero, Duala, Swahili, Zulu, Bangala, Ewe, Vai.

Great Britain. School of Oriental Studies, London: Swahili, Kikuyu, Ganda, Nyanja, Rundi, Shona, Sotho-Tswana, Zulu-Xhosa, comparative grammar of Bantu languages, Hausa, Ibo, Efik, Twi, Yoruba, Dinka, Nuer, Shilluk, Bari, Moru, Acholi, Arabic, Amharic, Galla: phonetics and linguistics.

At Oxford and Cambridge the Colonial Office makes provision for the instruction of probationers in Mende, Twi, Yoruba, Ibo, Efik, Hausa, Nyanja, and Swahili. This teaching is given by retired political officers or missionaries from the language areas concerned. It is the aim of the Colonial Office to build up a cadre of selected tutors who are qualified to give the probationers, in addition to language teaching, some practical knowledge of the career before them.

Italy. Scuola Orientale, Università Reale di Roma: Ethiopic, Amharic, Tigre.

Reale Istituto Orientale di Napoli: Amharic, Tigrinya, Berber.

Union of South Africa. Witwatersrand: Bantu philology, phonetics, Zulu, Sotho, Shona, Xhosa.

Capetown: Bushman languages, Xhosa, Sotho, Venda, Thonga, Tswana, and Bantu phonetics.

Stellenbosch: phonetics, Tswana, Pedi, Zulu, Xhosa, Nyanja, Karanga, introduction to the study of Hamitic and Sudanic languages.

Fort Hare: Sotho, Xhosa, Zulu, Tswana.

Pretoria: Zulu, Sotho, Bantu philology.

The University of South Africa conducts examinations in Bantu languages for a large number of external students.

In the main these institutions concentrate on the study of languages in the territories with which their governments are connected. The Université Coloniale at Antwerp is a state institution,

of which the principal function is the training of cadets for the colonial service. The *École Nationale des Langues Orientales Vivantes* is controlled by the French Ministry of Public Instruction; the attention given by it to the study of the African languages, other than Arabic, Malagasy, and Sudanese, is a modern development. The *École Nationale de la France d'Outremer* (the 'École Coloniale') is a state institution for the training of colonial cadets; its courses in African languages are limited to Arabic and Malagasy. Contributions to research in African languages have been made by the French scholars, Delafosse, Labouret, and Mademoiselle Homburger, while Drs. Laman, Burssens, van Bulck, and Father Hulstaert have done notable work on Congo languages. The Universities of Hamburg and Berlin continue to devote to African languages the study that made German scholarship in this field pre-eminent before the war. The support given to these studies by the German Government has in no way diminished. Professor Westermann of Berlin is one of the most notable figures in the African linguistic field of the present day, while the contributions of Professor Meinhof at Hamburg and Professor Klingenhoben, now at Leipzig, are well known. Dr. J. Lukas should be mentioned among the younger German scholars.

In Great Britain one of the first pioneers in the African research field was the late Alice Werner, who from 1917 to 1930 held a lectureship which was converted into a professorship at the School of Oriental Studies. With her should be mentioned the missionaries such as Dr. E. W. Smith, Dr. G. P. Bargery, and Dr. C. M. Doke. The researches of Professor Daniel Jones, continued by Dr. Ida Ward, Dr. A. N. Tucker, and Miss L. E. Armstrong in recent years, have developed the study of African linguistic problems in this country on modern academic and practical lines.

In 1932 the African Department at the School of Oriental Studies was considerably expanded; as at present organized it provides elementary courses in the main African tongues and arranges from time to time for special lectures by experts on particular languages; training is also given in methods of study for students anxious to work on languages in which instruction cannot be provided. The type of instruction that can be given is illustrated by a memorandum by Dr. Ida Ward, *Practical Suggestions for the*

*Learning of an African Language in the Field.*¹ It is a noteworthy fact that the British Government has not given the same direct assistance as Belgium, France, or Germany to institutions directed to the study or teaching of languages. The School of Oriental Studies, for instance, receives its main support from the University of London (and through this body a small share of the Treasury grant to universities) and has a grant from the Indian Government; the African Department largely owed its existence to an annual grant from the Rockefeller Foundation, which expires in 1939. With the assistance of this grant the School has been able to finance, wholly or partially, research expeditions to Nigeria (Dr. Ida Ward, Dr. Melzian, Dr. Lukas) and the Sudan (Dr. Tucker), and to publish some of the material collected on these tours.

In South Africa the Inter-University Committee for African studies has for a long time concerned itself with the co-ordination of research in this field and was responsible *inter alia* for the publication of the survey of work to which reference is made later in this chapter.² The university institutions in South Africa are largely financed by the State, but no subsidy is now given specifically for Bantu studies.³ The Universities of Capetown and Johannesburg have professorships of Bantu languages, whose holders, Dr. G. P. Lestrade and Dr. C. M. Doke, are among the foremost African scholars of to-day.

In the United States there are no institutions providing teaching in African languages, but research work in African languages has been carried out by linguists such as Professor Sapir (*The Gweabo Language of Liberia*, &c.), Dr. G. Herzog (*Jabo Proverbs*), and Professor M. J. Herskovits (*Kru Proverbs*, &c.).

Mention should also be made of the assistance given to linguistic research by the International Institute of African Languages and Cultures, whose work is more fully described in connexion with anthropological studies.⁴ The publication of an early memorandum on orthography⁵ was followed by a short linguistic guide for taking down new languages,⁶ a book on the phonetics of African

¹ Supplement to *Africa*, vol. x, 1937.

² See below, p. 81, footnote 1.

³ See Chap. II, p. 53.

⁴ *Ibid.*, pp. 51-2.

⁵ *A Practical Orthography of African Languages*, Memorandum I, 1927, revised edition, 1930.

⁶ *A Short Guide to the Recording of African Languages*, Memorandum XI, 1933.

languages,¹ and the pamphlet on learning an African language, referred to above. It has now an Advisory Linguistic Committee to which questions may be submitted. Grants have also been made for the study of Kanuri by Dr. J. Lukas, Bini by Dr. H. J. Melzian, Bali by Dr. E. Meyer, and the languages of the Southern Sudan by Dr. A. N. Tucker and Father J. P. Crazzolaro. The linguistic activities of the Institute and the visits of Professor Westermann to different areas of Africa have stimulated linguistic research in Africa and Europe.

III. THE CLASSIFICATION OF AFRICAN LANGUAGES

Early students of African languages found much interest in the attempt to deduce the history of tribal migrations from linguistic similarities; the supposedly most primitive forms of words common to a number of languages were held to indicate the ultimate place of origin of the peoples speaking them. Thus Sir Harry Johnston's *Comparative Study of the Bantu and Semi-Bantu Languages* illustrates by a map the conjectured routes of migration of all the Bantu tribes from a single centre on the eastern shores of Lake Chad. Modern students would hesitate to accept evidence of this type as sufficient ground for such an elaborate historical reconstruction.

Dr. E. W. Smith, in his address to the Royal Anthropological Institute in 1935 already quoted,² has given a summary of the present extent of our knowledge regarding the classification of African languages. He traces the first scientific classification to Professor R. Lepsius, of Berlin, who, writing before 1880, divided them into three groups: (1) Semitic, (2) Hamitic, (3) Primitive African, including (a) Bantu, and (b) mixed Negro. He placed Hottentot-Bushman in the Hamitic group and regarded the Negro languages as the diversified product of the mixture of the Hamitic and Bantu. F. W. Müller proposed a division into six groups, namely: (1) Semitic, (2) Hamitic, (3) Nuba-Fula, (4) Negro, (5) Bantu, and (6) Hottentot-Bushman, a classification also adopted by R. N. Cust.³ The Nuba-Fula group has now disappeared from the list, the languages which comprised it having been found to belong to other groups. The languages of the

¹ D. Westermann and I. C. Ward, *Practical Phonetics for Students of African Languages*, 1933.

² See Chap. II, p. 42.

³ *A Sketch of Modern Languages of Africa*, 1883.

continent are now divided by Dr. Westermann¹ into three families: (1) the Khoisan family, (2) the Negro languages, including (a) Sudanic, (b) Bantu, and (c) Nilotic, and (3) the Hamito-Semitic family.

The Khoisan languages are those spoken by the Bushmen and Hottentots; they have been placed together because, though Hottentot has Hamitic features, its closest relationship appears to be with Bushman; the connexion, however, with the latter is, at the best, remote. The numbers using these languages are few, for there are only about 17,500 surviving Bushmen, and although the Nama variety of the Hottentot language is spoken by about 50,000 people, it is progressively being replaced by Afrikaans. They represent, nevertheless, a linguistic problem of much interest. The Bushman dialects, of which as many as seventeen have been distinguished, falling into three main groups,² have been studied by Dr. W. H. I. Bleek, Miss L. C. Lloyd, Miss D. F. Bleek, and Dr. C. M. Doke. The Hottentot languages, which fall into four groups, of which only Nama and Korana are now spoken, have been the subject of considerable research, mainly by German students; an outstanding example of the phonetic system has been made by Dr. D. M. Beach.³

As regards the Negro, the second division of the languages as classified by Dr. Westermann, the name adopted may, perhaps, be taken rather as a convenient term of description, necessitated by the present state of our knowledge, than as an attempt at scientific definition. Of the families falling within this division the Bantu has been more fully studied than either the Sudanic or the Nilotic. The Bantu-speaking part of the continent has been described above.⁴ The north-west of Madagascar is also Bantu-speaking. The essential unity of several typical Bantu languages was shown in 1862,⁵ and the subsequent work of Dr. C. Meinhof established the study of Bantu on a scientific phonetic basis. The phonetics of Bantu have in later years been investigated by Drs. Doke, K. Laman, A. N. Tucker, Nekes, and others, and the influence of the London School of Phonetics, under the leader-

¹ 'Charakter und Einteilung der Sudansprachen', *Africa*, vol. viii, no. 2, 1935, pp. 129-48.

² I. Schapera, *The Khoisan Peoples of South Africa*, 1930.

³ *The Phonetics of Hottentot*, 1938.

⁴ Chap. II, p. 22.

⁵ W. H. I. Bleek, *Comparative Grammar*, 1862.

ship of Dr. Daniel Jones and Professor A. Lloyd James, has been widely extended in the same direction through its students, notably those attached to universities of South Africa. Dr. E. W. Smith summarizes the work still remaining to be done for the Bantu family as follows: the languages need scientific classification on the basis of phonetics, the noun classes, the vocabulary, and sentence building; the only classifications at present available are in the main geographical. A really sound classification presupposes accurate all-round knowledge of all the languages of the family, and as yet this is not attainable; there are many languages not yet recorded, and some of which the records are still incomplete.

The second family of Negro languages in Dr. Westermann's classification—namely, the Sudanic, spoken in the areas roughly situated between the Sahara and the equator, spreading from the Upper Nile region to Senegambia—contains tongues which up to a recent period were not recognized as having any affinity and which still appear extremely divergent. The researches of M. Delafosse and Dr. A. N. Tucker, however, support the hypothesis of a common relationship, though the classification into groups still presents great difficulties. M. Delafosse¹ divided them into sixteen groups, mainly on a geographical basis; Dr. Westermann, though Dr. A. N. Tucker² does not accept all his conclusions, now proposes a fourfold division: (a) Nigritic, or Old Sudanic, including in the west the so-called Kwa group (Ibo, Yoruba, Nupe) and the Ewe-Akan group (Ewe, Twi, and Fante); and in the east languages such as the Moru-Madi, Bongo-Baka-Bagirmi, and Ndogo-Bviri; (b) the Mande languages (Mandingo, Bambara, &c.), which grammatically represent a close unity, and in respect of structure and to a large extent of vocabulary approach the Nigritic; (c) the 'class'-languages, of which there is a chain across the Sudan from Kordofan to the mouth of the Senegal. Included in these are the languages of the Benue-Cross rivers (for example, Tiv), the Gur languages in the north of Togoland and the Gold Coast (Mossi-Dagbane, &c.), and the West Atlantic languages

¹ 'Les Langues du Soudan et de la Guinée', in *Les Langues du monde*, 1924.

² 'Survey of the Language Groups in the Southern Sudan', *Bulletin of the School of Oriental Studies*, vol. vii, part 4, pp. 861-96, 1935.

between the Ivory Coast and the mouth of the Senegal; (d) the Inner Sudan group occupying the territory between Nigeria and the Anglo-Egyptian Sudan. M. Eboué and other French writers have listed these languages, but an accurate survey of the Cameroons and French Equatorial Africa has not yet been made. The Inner Sudan group would seem to be far removed from the original Sudanic type.

A minor but interesting problem, still unsolved, is the position occupied by the language of the Negritos, the pygmies of the equatorial forest; the researches of Father Trilles¹ and Dr. Paul Schebesta² leave it doubtful whether the language now spoken by them is original, nor is it possible to define the precise nature of its affinities with the Bantu or Sudanic group. Recent researches, however, show that Efe, the most 'genuine' of pygmy languages, is Sudanic and has close affinities with Momvu and Lese; it is also related, though not so closely, to the Moru-Madi group. It would appear that, as regards the Sudanic languages as a whole, much research is still required before any definite conclusion can be established as to the relationship of the different tongues comprised; there are among them many more unrecorded languages than in the Bantu group, and it is not until a more comprehensive knowledge has been acquired that it will be possible to carry beyond the stage of conjecture the question of their general relationship to the Bantu languages.

The third family included in the Negro division—namely, the Nilotic—comprises tongues spoken in the Upper Nile region as far south as Lake Victoria. Two main branches are distinguished, Nilo-Sudanic (Shilluk, Dinka, Nuer, Anuak, Acoli) and Nilo-Hamitic (Bari, Masai, Nandi-Kipsigis, Tatoga). They show an equal blending of Sudanic and Hamitic traits, the more southerly, such as the Bari and Masai, being fundamentally Hamitic. The characteristics of the Nilotic and Nilo-Hamitic have been described by Dr. A. N. Tucker.

The third main division of languages, the Hamito-Semitic, presents relatively little difficulty; their genetic relationship has been adequately demonstrated.³ The characteristics of the Hamitic

¹ *Les Pygmées de la forêt équatoriale*, 1932.

² *Die Bambuti*, 1932.

³ G. A. Barton, *Semitic and Hamitic Origins*, 1934.

have been investigated by Dr. C. Meinhof.¹ Possibly the most interesting matter requiring fuller research is the extent of the influence which these languages have had on the Sudanic and Bantu families respectively. Arabic has had its influence both on Swahili and Hausa, both languages of growing expansion; the latter is Hamitic in grammar and Sudanic in vocabulary, and has also borrowed a large number of Arabic words.

IV. THE PROBLEM OF ORTHOGRAPHY

The early missionaries, working at a time when the study of phonetics was in its infancy, generally represented the sounds of African languages by the nearest symbols for sounds in their own. Consequently, where a language area was divided by a political boundary, or where missionaries of two nationalities were at work among the same tribe, rival orthographies grew up. A great number of different methods were devised even by investigators of the same nationality for representing the same sounds. The disadvantages of this were early recognized, and efforts were made to secure the adoption of a uniform system of orthography for all African languages, but it has not proved easy to secure agreement as to what that system should be. An orthography intended to be of general application was designed by Lepsius in 1850 at the request of the various Protestant missions.² A second edition was published in 1863, and further improvements in the original system have been made by Dr. Meinhof with special reference to Africa, and by Pater Schmidt in his 'Anthropos' alphabet. The accuracy of representation given by the Lepsius system, as modified by Dr. Meinhof, makes it an admirable instrument of scientific research; but there are practical difficulties in the way of its wider use. It is constructed by the addition of diacritic marks to the letters of the ordinary Roman alphabet, and the use of these marks has been found to have certain practical disadvantages. They tend to be overlooked by the careless reader; they are generally omitted in writing, and their addition to a printed letter puts an unnecessary strain on the reader's eye. Type with

¹ *Die Sprachen der Hamiten*, 1910.

² D. Westermann, in *Proceedings of the Rejaf Language Conference*, 1928, p. 15.

diacritic marks is, moreover, expensive, as it is more fragile than ordinary type and requires more frequent renewal.¹

For these reasons one of the first activities of the International Institute of African Languages and Cultures in 1928 was to lay down principles upon which a simpler and more uniform system of orthography should be based. It is manifestly impossible to have absolute uniformity throughout Africa, nor is this necessary, but the confusion of spellings of one language and of closely related languages has made it imperative that some system should be devised which will ensure that the sounds of the spoken word shall be adequately represented in writing, with the maximum practical utility and intelligibility to the African reader as its aim rather than exact representation to the foreign student. The new alphabet, which has acquired the name of the 'Africa' orthography, is based on the alphabet introduced by the Association Phonétique Internationale, and its guiding principle is that sounds for which the Roman alphabet provides no symbols should be represented by new letter-forms instead of diacritic marks. In the revised edition of the Institute's memorandum on orthography, its aim is given as 'to show how existing orthographies may be modified and improved';² it does not itself provide ready-made alphabets for every African language. This orthography has been criticized by Dr. Meinhof on the ground that uniformity is unnecessary; in his view a script should be used whose symbols as far as possible represent the same sounds in the vernacular and the European language locally used.³ Where, however, linguistic and political boundaries do not coincide, such a scheme is complicated by different governmental language policies, e.g. Mandingo (French and British), Hausa (French and British), Kongo (Belgian and Portuguese), Swahili, and the kindred dialect of Kingwana (Tanganyika and Belgian Congo).

Difficulties, both economic and psychological, lie in the path of the would-be spelling reformer. Existing stocks of literature, the expense and difficulty of adding new symbols to sets of type previously used in printing, the exigencies of modern mechanical

¹ International Institute of African Languages and Cultures, *A Practical Orthography of African Languages*, 1930, pp. 4, 6.

² *Ibid.*, p. 7.

³ 'Principles of Practical Orthography for African Languages', *Africa*, vol. i, 1927, no. 1, pp. 228-36.

means of transcription, such as the typewriter, make for reluctance to adopt a change of spelling. The psychological effect of a proposal to change an existing spelling is also of considerable weight; and although in several areas representative committees have accepted a new form of orthography and decided upon its use, the decision has not always been implemented, and it has sometimes been decided later to revert to the old style of writing. The large proportion of education left by government to missions has often invalidated the official decision to adopt a new orthography and in many cases the government has not pressed its decisions.

One of the main arguments brought forward against a reformed African spelling is that the letters do not conform to a so-called standard English alphabet, but in making this statement the fact is overlooked that existing alphabets do not conform to English; the letters *i* and *u*, for example, have, and must continue to have, their continental value; and the English values must be learnt *per se*. The difficulties of learning the new letters or new values of letters, great as they may appear to the older generation, tend to be exaggerated, as has been shown in those areas where a vigorous policy has been carried out and books are appearing rapidly; and it should be remembered that children learn the new alphabet as easily as the old, in many cases more easily since it is more accurate.

Dr. Westermann, the German Director of the International Institute of African Languages and Cultures, visited the Gold Coast in 1927, the Southern Sudan in 1928, and Nigeria and Sierra Leone in 1929 in order to investigate local languages and explain the method of their representation by the 'Africa' script. All these territories officially adopted the orthography agreed upon at these conferences. In the Sudan a linguistic adviser was appointed to carry out the decisions of the Rejaf Conference, and a considerable amount of useful literature has been produced. Standardization is not yet complete, since the whole linguistic area is a complicated one. In the Gold Coast the new orthographies are in use and literature is growing rapidly. The situation in Southern Nigeria is described on p. 91: in Northern Nigeria a modified form of the 'Africa' script has been adopted for Hausa and Tiv. In Sierra Leone the 'Africa' orthography is used for Mende and Temne,

though few vernacular publications have been issued. The Central Orthography Committee in South Africa was responsible for the revision and unification of the orthographies of Zulu, Xhosa, Northern Sotho, and Tswana: in these some, but not all, of the recommendations of the International Institute have been followed. At the present moment the unification of the orthographies of Nyanja, Lozi (Kololo), Bemba, and Thonga is being discussed in the hope of bringing these four vernaculars into line. In over forty vernaculars some form of the 'Africa' script is being used. It will be seen that the aim of the International Institute to provide a simple and adequate orthography has in some measure been attained.

V. ACTION TAKEN IN REGARD TO THE NATIVE VERNACULARS IN THE DIFFERENT TERRITORIES

(a) *The Union of South Africa*

In the Union a sub-committee of the Inter-University Committee for African Studies was appointed in 1932 to deal with the question of linguistic research and of the development of vernacular literatures. In its report the convener, Dr. C. M. Doke,¹ was able to present the most exhaustive survey of the linguistic situation that exists in any African territory. The principal linguistic problem of South Africa is the selection and standardization of those Bantu languages which should be encouraged for literary purposes, a question closely bound up with that of the vernaculars to be used in education. The great majority of the native population of the Union are Bantu-speaking, and among them education has advanced to a point where there is a demand for literature; the problem is, however, complicated by the fact that seven separate Bantu languages are officially recognized for educational and other purposes, Zulu, Xhosa, Tswana, Southern Sotho, Northern Sotho, Thonga-Shangaan, and Venda.² According to Dr. Doke, the South

¹ 'A Preliminary Investigation into the State of the Native Languages of South Africa, with suggestions as to Research and the development of Literature', *Bantu Studies*, vol. vii, 1933, pp. 1-98.

² See *Report of the Interdepartmental Committee on Native Education*, 1935-6, U.G. No. 29, 1936, para. 439. In referring to languages, the modern form of names is used, since the language groups are not confined to the areas to which they have given their names. Thus 'Sotho' is used for the languages spoken not only by the Basuto but by others in neighbouring areas. See also Chap. II, p. 21, footnote 1.

African vernaculars can be classified into geographical zones whose languages show broad common characteristics but are not necessarily mutually intelligible; these zones are subdivided into 'groups' of languages with a 'high degree of mutual intelligibility as well as an extreme sharing of grammatical, phonetical, and lexicographical phenomena'. South Africa proper and the mandated territory form two linguistic zones.

The languages of the first zone fall into four groups—Ngoni, Sotho, Venda, and Thonga. Within each group a speaker of any one dialect can with little difficulty make himself understood in any other. Thus a speaker of Southern Sotho can make himself understood in the whole of the Sotho-speaking area, from the Kalahari in the west to the borders of Natal in the east, and from the Rhodesian border in the north to the northern districts of the Transkei in the south. The Ngoni and Sotho account for 5,500,000 of the Bantu population of the Union and the High Commission territories.¹ The Ngoni group comprises two recognized clusters, the Xhosa and Zulu languages, while Swazi, formerly regarded as a dialect of Zulu, is now held by some authorities to be the chief member of a third; together they are spoken by over 3,000,000 people; mention may also be made of Rhodesian Ndebele, a dialect of Zulu, Transvaal Ngoni-Ndebele, another dialect of Zulu, and Transvaal Sotho-Ndebele, a mixed Zulu-Sotho dialect. These are not to be used, however, for educational purposes. A good deal of literature has been produced in Xhosa by native writers; very much less in Zulu. Dr. Doke holds that Swazi will never become a literary vehicle and is sufficiently served through the medium of Zulu, but literary developments in this language appear to be beginning. A standard Zulu dictionary is being prepared by the Bantu Studies Department of the Witwatersrand University in co-operation with the Natal Native Education Department. The Sotho group, comprising considerably over 2,000,000 speakers, has three well-marked divisions, Northern (Transvaal) Sotho, Southern Sotho (the language of Basutoland and adjacent portions of contiguous territories), and Tswana (the language of about 90 per cent. of the inhabitants of the Bechuana-

¹ C. M. Doke, 'The Linguistic Situation in South Africa', *Africa*, vol. i, no. 4, 1928, p. 479. See also G. P. Lestrade, *op. cit.*, p. 135.

land Protectorate). Opinions differ as to whether unification would be best attained by a blending of all three groups or by the deliberate development of Southern and suppression of Northern Sotho. Southern Sotho has already produced vernacular writers of distinction; the well-known life of Chaka, by Mofolo, is in this language. Dr. Doke's own view is that Southern Sotho should be the basis of a common language enriched by words from the other dialects.¹ A Tswana Language Board is studying the possibility of unifying the many dialects of this cluster and agreement has been reached on orthography. Several of Shakespeare's plays have been translated into Tswana by S. T. Plaatje, the *Comedy of Errors* being the only one published so far, while *Julius Caesar* is in course of publication, the latter edited after Plaatje's death by Dr. G. P. Lestrade.

Venda has only about 150,000 speakers, but it cannot be included in any other language cluster. Its literature is still only developed for pioneer missionary purposes, and the Inter-University Committee call attention to the need for the provision of elementary school-books of all types. Thonga is spoken by about 750,000 persons, the main body being in Portuguese East Africa. Since, however, the Portuguese Government does not allow the publication of vernacular literature other than translations of the Bible accompanied by a Portuguese version, there is little possibility of an agreed policy for the whole Thonga-speaking area. The Thonga group comprises three main clusters, Thonga, Ronga, and Tswa. A Tswa grammar was published by J. A. Persson in 1932, which the committee suggest should be made the basis of a grammar of the whole group showing dialectal differences.

The second zone, the mandated territory of South West Africa, contains two groups, Herero and Ambo. On both the information is very meagre, and a general survey, extending into Angola, is required in order to ascertain the populations involved and the relative importance of the various dialects. In making such a survey political questions would again arise because of the language policy in Portuguese territories.

The development of vernacular literature in South Africa has

¹ C. M. Doke, *op. cit.*, p. 482.

been much assisted by the policy of the Cape Province of paying half the cost of school text-books¹ and by the work voluntarily undertaken by Mr. W. G. Bennie, late Chief Inspector of Native Education in the Cape Province, as adviser to native writers; he has also edited a series of Stewart Readers, which contain African contributions in prose and verse. The Lovedale Press, the Morija Sesuto Book Depot, the Tiger Kloof Book Room, and the Department of Bantu Studies in the Witwatersrand University are among the chief bodies which finance the publication of original vernacular literature. Many manuscripts of merit in Xhosa are held up for publication by lack of funds. The Interdepartmental Committee on Native Education, appointed in 1935, made two important recommendations with regard to vernacular literature—that a sum of money should be provided annually from the Native Education Fund, to be awarded in prizes for original works in Bantu languages, and that committees should be appointed to formulate such terminologies as were required in the subjects of school instruction for each Bantu language or language group.²

A conference of Bantu authors was convened in October 1936 through missionary enterprise, as a result of which a Literature Committee was set up under the South African Christian Council with sub-committees for different language areas. The Southern Sotho Committee has been active in preparing a bibliography of Sotho publications and is taking up the question of gaps needing to be filled, manuscripts awaiting publication, and method of distribution.³ A second conference, held in September 1937, recommended the formation of one Central Literature Board for the South African Bantu, that this board should found a Bantu Academy, membership of which would be conferred on those who have done meritorious work in Southern Bantu languages, and that literature committees be set up for each language or language group.⁴ The activities described above show a lively interest in native literature, and practical help afforded to native writers, which might well be followed in other parts of Africa.

¹ *Report of the Interdepartmental Committee on Native Education*, 1935-6, U.G. No. 29, 1936, para. 384.

² *Report*, para. 443.

³ See *Books for Africa*, Jan. 1938. *Quarterly Bulletin*, International Committee on Christian Literature for Africa.

⁴ *Ibid.*

(b) Southern Rhodesia

In Southern Rhodesia it was decided, when the Department of Native Education was inaugurated in 1928, to make grants towards the publication of text-books in two recognized vernaculars, one for Matabeleland and one for Mashonaland. A Language Research Committee was appointed under the chairmanship of the late Father Barnes, of Penhalonga, and in 1929 Dr. Doke was invited to make recommendations, based on a linguistic survey of Mashonaland, for the adoption of a unified language and a standard orthography. His investigations showed that of the five leading Shona languages, Zezuru, Karanga, Korekore, Manyika, and Ndau, the first four had a very high percentage of common words, while many were common also to Ndau; this fact had been obscured by the diversity of symbols used to represent similar sounds. Dr. Doke recommended¹ the recognition of Ndebele or Zulu for the Ndebele-speaking area, and of Shona for the main Shona-speaking area, but pointed out that the Karanga group in the west of this area has developed a language too different from the others to be included in the unification. For Shona and Karanga he recommended orthographies based on the principles advocated by the International Institute of African Languages and Cultures. These have been adopted by government and the Language Committee prepares publications in them, but their use is not officially pressed, and some missions do not accept them. A newspaper, *The Bantu Mirror*, is produced in English, Shona, Ndebele, and Zulu, by the Argus Company, assisted by a government subsidy, in return for which approximately 1,600 copies are issued free to native schools.

(c) Northern Rhodesia

In the Northern Province the Bemba language predominates, and is perhaps the most widely understood and useful vernacular in the territory. In the Central Provinces the Lamba-Luba-Wisa dialects show common characteristics with the Bemba language. In the East Luangwa Province Chinyanja is widely used by government officials and missions as a lingua franca, and although

¹ *The Unification of the Shona Dialects*, 1931.

it is not a vernacular of the country it has common characteristics with Chewa and the other languages spoken by the local tribes. In the Southern Province the Ila-Tonga dialects predominate; a committee was appointed to consider the unification of these two closely related languages in 1928, and a dictionary of a unified language was compiled by Father Torrend of the Jesuit Mission, but no progress has been made with the work of unification. In the north-western districts the Lunda-Lovale languages are spoken in various dialects. They are akin to and strongly influenced by the Luena language spoken in Angola; these languages are also spoken by the subject and migrant tribes forming a large proportion of the population of the Barotse Province, but the predominant language in that area is Kololo, spoken by the ruling classes and used as an official language. Swahili is spoken by small communities originating from the East Coast in slaving times.

Four languages are recognized for the purpose of the departmental examinations of administrative officers; the government newspaper, first issued in 1936, publishes articles in English, Nyanja, Bemba, Kololo, Ila, and Tonga. The Provincial Commissioners' Conference of May 1934 agreed that it was desirable to reduce the number of official languages, but opinions were divided as to the most suitable lingua franca. At present school-books are provided by the missions in most of the more widely spoken dialects, but are only subsidized by government if printed in Bemba, Ila-Tonga, Kololo, now called Lozi, and Nyanja. A committee appointed to consider the standardization of Bemba orthography in 1930 recommended the adoption of the 'Africa' orthography, but it is not generally used in other vernacular literature. The interterritorial conference of education officers from the two Rhodesias and Nyasaland held in 1935 was unable to reach any agreement on a common language policy.

Contact between Africans and Europeans in industrial and farming areas has stimulated a general desire on the part of Africans to learn English and a tendency to view education in the vernacular with suspicion, and some little amount of English is widely spoken. 'Kitchen Kaffir', a bastardized mixture of the vernacular, Dutch, and English, is generally used as a medium of communication with the European overseers or employers. The Government

of Northern Rhodesia has set up an African Literature Committee, membership of which includes government officials, missionaries, and Africans. A small sum has been allocated by the government for the production of needed literature. The committee formulated the policy that all books in the Nyanja language should be published in Nyasaland or with the co-operation of the Nyasaland Education Department. It is considering the production of books in the official vernaculars, and the promotion and distribution of literature through libraries for rural and urban areas.

(d) *Nyasaland*

In Nyasaland the predominant language, Nyanja, has been adopted as an official language by government. Knowledge of it is compulsory for departmental examinations, and it is intended to introduce it into all schools after two years' instruction in the local vernacular. This policy, however, meets with opposition from some missionaries, partly on the ground that Nyanja, as a language of the conquered peoples, is despised by the dominant tribes, and partly owing to the difficulty of revising existing textbooks. The Livingstonia Mission continues to use Tumbuka, and in the area at the north end of Lake Nyasa, Konde, while other missions use Yao; new literature is still published in these languages. Officials receive a bonus for knowledge of Tumbuka or Yao as extra languages. *Man of Africa*, the biography in Nyanja by Samuel Y. Ntara, which won in 1933 the prize offered annually by the International Institute of African Languages and Cultures for an original work in an African language, was published in 1936 by the Dutch Reformed Church Mission at Mkhoma.

(e) *Tanganyika*

In Tanganyika it is the policy of the administration to develop Swahili as a lingua franca. This language is spoken by the people of the coastal belt as a mother tongue, and is used as a second language by large numbers of people elsewhere. In all government schools it is the medium of instruction until replaced by English, which is usually introduced in the fifth year: no other vernacular is taught. In addition, there are government and native administration primary schools where a full six-year course

is conducted entirely in Swahili. In government-assisted mission schools Swahili is the official medium, but in many bush schools instruction is given in the mother tongue, viz. Sukuma, Nyamwezi, Konde, Hehe, Zaramo, Shambala, and dialects of Chaga. In these schools also, Swahili is introduced in the second year. A government newspaper, *Mambo Leo*, and a children's magazine, *Mwanafunzi*, are published in Swahili.

(f) *Kenya*

In Kenya also, Swahili has been used for many years. For Kipsigis-Nandi no agreement has been reached on a standard dialect or orthography, the language having been written differently by different missions. For Kikuyu, a standard orthography was agreed upon by the missions and formally adopted by government in 1933. Later, objections were made, and the orthography was not used, but it is reported that the question of a standardized orthography is again being raised.

(g) *Uganda*

Ganda, a Bantu language originally spoken by the Ganda only, has spread over a large part of the protectorate through its use by missions for educational purposes. In elementary schools the following vernaculars are also taught: Teso, which is a Nilo-Hamitic language; Acoli and its variants, which are Nilotic; Madi, Gwara, and Kakura, which are Sudanic, and Nyoro and Kyiga, which are Bantu. The annual report of the Education Department in 1927 describes the translation of text-books into these languages as an insuperable difficulty, but competent opinion is expressed that simple text-books are slowly being produced in some of them. A standard orthography for Ganda was agreed upon in 1931, but its use does not seem to have become general.

(h) *The position regarding Swahili in East Africa*

The development of Swahili as a lingua franca for the four East African territories is now an accepted policy.¹ Its introduction into the schools has gone farthest in Tanganyika; in Uganda it has met with a good deal of opposition from missionary bodies

¹ See *Colonial Office Memorandum, Africa*, 1110, 1927.

who, to facilitate their work, would have preferred to see the extension of Ganda. They have now agreed that Swahili shall be taught as a subject in appropriate schools outside Buganda and Busoga (Soga being closely allied to Ganda), and that in certain 'mixed language areas', i.e. those in which the vernaculars are not Bantu, it shall be used as the medium of instruction. Opposition to the policy of the development of Swahili as a lingua franca comes from Africans themselves in some parts, particularly in Buganda, as they regard it as an attempt to stop them from learning English, or at least delay them. Something also must be allowed for the fact that Swahili is regarded as a Mohammedan language by the considerable number of Christians who are concerned. Where there is such a multiplicity of languages, however, some official lingua franca must be adopted. Swahili has shown powers of expansion and become the commercial lingua franca which must be acquired in some degree by all Africans who seek employment outside the tribal areas, and in the opinion of many it is at the moment the only suitable official language. Others hold that English should be the official language, but the obvious difficulty in the way of adopting this latter course at the present time is the very small percentage of Africans who are sufficiently educated to speak it with any fluency, and the still smaller number qualified to teach it. The Report of the Joint Parliamentary Committee on East Africa, published in 1931, in recording these opinions, notes that it would appear desirable to encourage a gradual change from Swahili to English.¹

There are two theories of the origin of the Swahili language. Some scholars assert that it was originally the language of one of the tribes occupying a small region on the Lamu coast² of East Africa opposite Zanzibar. Others think that it is not based upon the language of any one tribe, but that it grew up in Arab settlements along the coast as a result of the fusion of many different Bantu languages with Arabic, and that in this way the Arabic element is as much part of the language as the Bantu element. It owed its expansion in the first instance to its adoption by the

¹ *Report of the Joint Committee on Closer Union in East Africa*, 1931, vol. i, p. 45, para. 107.

² D. Westermann, 'Swahili as the Lingua Franca of East Africa', *The Church Overseas*, Jan. 1933, pp. 1-11.

Arab traders who, in the days before European colonization began, had the monopoly of trade and, above all, of the slave trade, from the coast up into the Congo. They were joined by others, such as Persians and Indians, and the descendants of slaves from the interior, who formed the composite people known to-day by the name of Swahili, and their language became the common tongue not only of the trade routes, but of the coastal areas.

Swahili has certain characteristics which account for its capacity for expansion. While it has a large number of words borrowed from the Arabic, these have been so far adopted into general use as to lose their foreign character, and have thus added to its richness and flexibility. On the other hand, it is not in a grammatical sense a mixed language, but is of a pure Bantu type, simple in structure and with great elasticity of expression; it has a further advantage in that it is closely related to most of the languages of East Africa, while it has lost the distinctions of tone which make some of these difficult to master. It has extended throughout East Africa, and into the Congo. It has two important dialects, that of Mombasa (Kimvita) and of Zanzibar (Kiunguja). The former is now confined to the littoral region of Kenya; the latter is the dialect widely dispersed in East Africa, and is spoken by all who have any claim to education from the coast to the great lakes. Farther west, on both sides of the Congo border, this widespread language, changed considerably from its original form, is known as Kingwana.¹ On the East Coast the Arabic script, formerly the accepted script and still important for documents, is still in use, though tending to die out.

An Inter-Territorial Language Committee was set up in 1930; it consists of sixteen members, representing Kenya, Tanganyika, Uganda, and Zanzibar. Its functions are to establish a standard orthography for Swahili, to revise existing text-books, encourage African authors, and control the preparation of dictionaries. It has been accused of trying to force strange words on the African, and it is very commonly criticized for having no African member—a situation which it seems desirable to remedy. There is now a considerable literature in Swahili, and it is claimed that it has

¹ See below, p. 95.

shown itself capable of adaptation to the expression of new processes of thought, and even of providing a terminology for technical uses.¹

(i) *Nigeria*

In Southern Nigeria the languages officially recognized for vernacular education are Yoruba, Ibo, and Efik-Ibibio. Literature exists also in Bini (Edo) and Sobo, and the Education Department will register as 'vernacular teachers' men who speak other vernaculars, such as Ogoni and Soko. Studies have been made of Bini by Dr. Melzian, and of Ibo and Efik, particularly from the point of view of tone structure, by Dr. Ida Ward. The 'Africa' orthography was adopted in 1929 by the local education committees for Yoruba, Ibo, and Efik, and in the same year an Ibo Translation Bureau was formed, which prepared grammars, translations, and school readers, and encouraged the production of works in Ibo by native authors. An Efik Bureau, established in 1930, did similar work in Efik. In the interests of economy these bureaux were first amalgamated and then closed. Work on an Efik dictionary, begun by the Efik Bureau, is still proceeding. Owing partly to the expense of reprinting current literature, the Protestant missions have not yet given effect to the decision, in which they participated, to adopt the 'Africa' orthography; since the Catholic missions as well as the government have done so two scripts are now in current use. In Yoruba, however, the new script has not been used by either government or Roman Catholic missions; the older system uses diacritic marks, which appear in many cases to be disregarded by native teachers. As far as orthography is concerned, however, the major problem of finding a satisfactory script is solved; all that has to be done is to overcome the incidental difficulties of putting the solution into practice. Financial assistance by the government would remove one of the main causes of opposition.

In the Ibo-speaking districts a more serious question, which is still far from solution, is what shall be the form of the literary language. The Protestant missions use 'Union Ibo', the composite language into which the Bible was translated by Archdeacon

¹ D. Westermann, in *The Church Overseas*, Jan. 1933, op. cit., p. 10.

Dennis in 1915. This is said to be based on the dialect of the Owerri region, but speakers of other dialects, including Onitsha, Bonny, and Aro Cuku, helped in the translation. Moreover, in the Owerri area itself, there are many dialectal variations. The verb formations of this area, which differ considerably from those of some other Ibo-speaking districts, have been generally but not consistently used, and the sound systems are apparently not those characteristic of any single dialect. The form of Ibo recommended by Dr. Westermann during his visit to Nigeria in 1929 is a combination of Owerri construction with 'union' vocabulary. This is the basis of the grammar by Mr. R. F. G. Adams, published by the Ibo Translation Bureau. Dr. Ida Ward's investigations have shown the importance of tone and revealed that this varies less from one dialect to another than any other element. The difficulties that result from the prevailing indecision as to language policy have been described by Miss M. M. Green, an anthropologist who made a field study of the Ibo in 1935-7.¹ In her view it is essential to obtain the material for the development of a satisfactory common language by means of a systematic dialect survey carried out by experts. Such a study requires the collection of data sufficient to provide a statistical basis for the union language to be adopted, and it would provide material for the much needed dictionary of this important language, which is spoken by three to four million people.

In Northern Nigeria the principal languages are Hausa, Nupe, Tiv (Munshi), Kanuri, and Fulani, Hausa being used as a lingua franca over a large area. A Hausa dictionary has been compiled by Dr. G. P. Bargery, the Bible has been translated into Hausa, the New Testament into Nupe, Tiv, and Tangale, and parts of it into twenty-eight other languages. An investigation was made in 1932 by Dr. J. Lukas into the Kanuri and neighbouring languages in the Lake Chad area under the auspices of the International Institute of African Languages and Cultures. His *Study of the Kanuri Language* is now published. Work on Fulani, a language which presents problems of scientific and practical interest, has been done by Mr. F. W. Taylor, Mrs. Leith Ross (whose grammar

¹ 'The Present Linguistic Situation in Ibo Country', *Africa*, vol. ix, no. 4, 1936, pp. 508-23.

was published by the Nigerian Government), and several French linguists. There is need for further research on this language. A Translation Bureau at Zaria is responsible for the provision of text-books, and in 1933 inaugurated the publication of volumes of fiction in Hausa by native authors. Mr. R. M. East, who is in charge of this scheme, has pointed out¹ the difficulty of developing a literature of any quality in a language which those who are taught to write it cease to read or write at the age of 12, when their education begins to be conducted in English. Nevertheless, five manuscripts had been published by 1936, each of about fifty pages. The Translation Bureau has also had to deal with the question of the incorporation into the language of foreign words, both those which have been adopted into colloquial usage, and those which are needed to convey ideas for which the vernacular has no equivalent. Earlier practice in Northern Nigeria was to borrow such words from a language believed to be more closely akin to the vernacular than English; thus words lacking in Hausa were supplied from Arabic, and in Tiv from Hausa. This method has now been abandoned, and the alternatives of inventing a vernacular equivalent for a new concept, or using the English word, are used according to circumstances. In Arabic and Fulani, languages of great flexibility, not much difficulty has been found in inventing new vernacular terms. In Hausa, where large numbers of English words are being spontaneously incorporated into the language, terms which have to be borrowed are taken from English, but unassimilated words are used as little as possible. The introduction of English words, incidentally, is likely to limit the use of publications to British territories, since to the Hausa-speaking area in French territories, the English words will not be familiar, a development illustrating the need for co-operation across political frontiers. The question of the spelling of such words also arises; if they are treated as foreign words, and spelt as in English, the consistency which is the essence of a phonetic orthography is ruined. The method now followed as regards Hausa is to spell assimilated words phonetically and write unassimilated words in italics in the English spelling. In other languages foreign words

¹ 'A First Essay in Imaginative African Literature', *Africa*, vol. ix, no. 3, 1936, pp. 350-8.

introduced into text-books are spelt phonetically throughout.¹

In the British Cameroons, Kanuri, Hausa, or Fulani is used in the elementary schools of certain districts, with English at the end of the course and in the middle-school classes. Of the other languages, Duala, Bali, and Bakweri are the chief. Duala, the main centre of which is in French territory, is a vernacular widely used by the Basel mission, who have produced a considerable literature. The numerous less important languages are not likely to develop a literature, and it has been decided to teach English after a short period of learning in the mother tongue. Pidgin English has been established for some time, and it is the policy of government to replace this by simple English based on limited vocabularies.

(j) *The Gold Coast*

In the Gold Coast, including the mandated territory of Togoland, the leading languages are Twi-Fante, Ga, Ewe, and Dagomba (Dagbane). Twi and Fante are closely akin, but have had a separate literature for more than half a century, so that unification is difficult. Mossi is so closely related to Dagomba that the same literature is suitable for speakers of both. In the south-west a dialect of Fante called Nzima is spoken; Africans who use it are endeavouring by their own efforts to establish it as a written language. There are good vernacular literatures in Twi, Ga, and Ewe, mainly produced by German missions. There has been an increase recently of the production of books in Fante, in which language the Bible is now being completed; that of Dagomba literature only began in the last year or two, although the language extends over a wide area. It is, however, making progress, and a valuable study is being made by district officers. The Gospel of St. Matthew and the Acts of the Apostles have been translated, and a Dagomba dictionary, in the compiling of which the missionaries have given assistance, will shortly be published. The government has officially adopted the 'Africa' orthography, and excellent new school-books have appeared in Twi and Fante. The Achimota College press has been active in vernacular printing.

¹ R. M. East, 'Language Tendencies in the Languages of Northern Nigeria', *Africa*, vol. x, no. 1, 1937, pp. 97-105.

(k) Sierra Leone

In Sierra Leone the main languages are Mende, Temne, Limba, Kono-Vai, and Manenka. There is little vernacular literature, what there is being mainly in Mende and Temne. The 'Africa' orthography has been adopted. English is used mainly as a medium of instruction.

(l) Gambia

In the Gambia, Mandinka (a branch of the widespread Mandingo language), and Wolof or Jolof (also spoken in French West Africa) are the main languages. There is little vernacular literature.

(m) The French Territories

The leading language of French West Africa is Mandingo, with three main dialects, Djula, Bambara, and Malinke. Owing to the insistence of the administration on French as the language of instruction¹ little vernacular literature exists apart from devotional books. A collection of texts in the Dyerma language of the Niger valley, with a grammar and vocabulary, made in the 'Africa' orthography, by Colonel Ardant du Picq, was recently published in the official *Bulletin des études scientifiques et historiques*. An obstacle to the use of this orthography is the argument that, as the greater quantity of school literature is French, it is less confusing to the native to represent his language by symbols whose meaning corresponds to that which they have in written French.

In French Equatorial Africa, Sango, 'a Sudanic counterpart of Lingala',² appears to have something of the position of a lingua franca; it has a number of borrowed French words and is being developed by missions as a literary form.

(n) The Belgian Congo

The Belgian Congo recognizes for official purposes four of its 200 native languages, Kongo, Luba, a modified form of the Kingwana dialect of Swahili, and Lingala, the last being also originally a commercial lingua franca based on the vocabulary of Bangi, Lolo, and Ngala.³ Commercial accounts, the keeping

¹ See Chap. XVIII, p. 1263.

² E. W. Smith, 'Africa: What do we know of it?' *Journal of the Royal Anthropological Institute*, vol. lxxv, 1935, p. 51.

³ Ibid.

of which is obligatory, may be kept in Ruanda, Rundi, Kongo, Swahili, Luba, or Lingala. The standardization of Kongo and Lingala is under discussion. A standard Luba has been adopted by the Catholic missions, and in 1936 the Protestant missions accepted a standard based upon a new *Grammar and Vocabulary* published by the Conseil Protestant du Congo. Attempts by the Protestant missions to produce a standard Kingwana did not meet with much success owing to the diversity between different dialects, but the hope of unifying the two standardized forms which exist ('Lualaba' Kingwana, south of Stanleyville, and 'Ituri' Kingwana north-east of Stanleyville), has not been abandoned, the missionaries working in the northern regions having agreed to seek gradually to improve the poorer form of Kingwana spoken by their people until it reaches the standard of 'Lualaba' Kingwana. Professor E. de Jonghe in 1935¹ proposed the development of Luba as a single language for the whole territory on the ground that Luba is spoken over a wide area and is easily learnt by other tribes, while Lingala and Kongo are spoken only by small groups, and Swahili is a foreign language to the natives of the Congo. This proposal is not accepted by all who are interested in the language problems of the Congo, nor is it agreed that Lingala and Kongo are spoken by small groups only. The present Governor-General, anxious to make progress with the language question and orthography, has called a joint conference of government officials and representatives of the Catholic and Protestant missions.

(o) *The Portuguese Colonies*

Thonga is the most important language of Portuguese East Africa, though several other languages and dialects are used in some areas. Kongo and Umbundu are the main languages of Angola.

The insistence of the administration on the use of Portuguese as the language of school instruction places the vernacular languages in a position corresponding to that in the French territories. Missions are permitted to use vernaculars for religious teaching, but vernacular publications are discouraged or forbidden.

¹ See E. de Jonghe, 'Vers une langue nationale congolaise', *Bulletin de l'Institut Royal Colonial Belge*, vol. vi, 1935, pp. 340-51.

VI. THE INFLUENCE OF EDUCATIONAL POLICY ON LINGUISTIC DEVELOPMENT

Great as is the seeming multiplicity of languages, there is not an equal measure of real diversity: the tendency of closer examination has been to reveal significant and essential similarities not only in the sound system and vocabulary, but even more in structure and idiom. It was therefore to be expected that, with the increase of intercourse following European occupation, there would, in any case, have been a progressive measure of assimilation resulting in the emergence of dominating languages. This process seems to be determined by a variety of circumstances—such, for instance, as the acquisition of a superior value by the speech of a ruling race, or the existence of a degree of kinship to neighbouring tongues which makes for a natural amalgamation, a factor which would seem to account for the spread of Hausa and Swahili or the predominance of one dialect, Malinke, throughout the large Mandingo area.

These spontaneous developments are now subjected to deliberate measures of educational policy. That those measures will have an important effect in moulding the form of the languages concerned is obvious, but it is not yet possible to estimate the extent to which they will determine the survival of different languages or language groups. A language, over and above its value as a means of communication, is an integral part of the individuality of a people, intimately connected with every aspect of its social life, and it derives from this source that 'emotional' quality which makes it resistant to influences from external sources. It was the emotional element which enabled some of the European languages to resist the influence of latinization and to emerge subsequently in a national form, while others, though submitting to the Latin influence, nevertheless reproduced much of their own idiom and vocabulary in the form of language finally evolved. There are, again, many instances in which people who have been politically and economically assimilated have still retained their own speech. Resistance of this type is, however, a varying force; as Meillet has pointed out with regard to the past, 'all the regions whose history is at all ancient have, within historical times, changed their

language at least once, and often two or three times'.¹ Only experience will show the extent to which the African languages, with their absence of a literary tradition, will assert themselves in the face of the influences to which they are being subjected. The effect of the steps taken to substitute a lingua franca or a 'union' language for the local vernacular would seem to demand careful observation, and policy may have to be modified where such languages do not appear to be winning their way by a natural process of assimilation.

Of the value of a policy which encourages the formation of larger language units there can be no doubt, and the benefits are by no means only those of administrative convenience. It is supported also by the need for a reading public wide enough to make commercial publication possible. It is impossible to estimate the minimum economic unit for the production of literature; in some cases 200,000 suffices for a vernacular literature which is produced without subsidy, while in other parts of the continent it is estimated that 500,000 or even 1,000,000 is for Africa, with the low economic status of its peoples, the minimum. Nevertheless, the importance which attaches to a language as part of the life of a people is so great that their intellectual development would be prejudiced by any measure which imposed on them for educational, and ultimately for literary purposes, a language to which they could not readily accommodate themselves. Though for the present vocational and higher education is necessarily given through the medium of a European language,² yet educational policy, at all events in the British territories, assumes the growth of vernacular literature which will minister to the growing intellectual life of the community. It cannot at present be foreseen whether an African or a European language will ultimately become the vehicle of the higher forms of intellectual activity; the experience of Asia would seem to show that there may be a parallel development, in which the European and African language each has its own function, both for literary and other uses. If any general conclusion is possible in a matter where the factors are still so indeterminate, it is that administrations should, in dealing

¹ *Introduction à l'étude comparative des langues indo-européennes*, 5th edition, 1922, p. 11.

² See Chap. XVIII, pp. 1257 ff.

with questions in this field, look on the problem as one demanding not merely linguistic study of the traditional academic type but an examination of all the social considerations involved. Many of the problems arising demand a comprehensive study extending beyond territorial limits, and co-operation between all who are working in a given language area, if a uniform policy is to be achieved in regard to the larger language groups. Finally, stress must be laid on the need for encouragement both with advice and finance of the African writer, and on the advisability of constant consultation with the African himself, on the whole question of the future of the vernacular, of the choice of a literary language, and of the possibility of a vernacular press. He must, in the long run, be the deciding factor.

VII. DEVELOPMENTS IN LINGUISTIC RESEARCH

Linguistic research in Africa has a field of investigation which is particularly important in the case of languages which have evolved no script. The modern elaboration of a technique for accurately distinguishing and reproducing speech-sounds has immensely increased the efficiency of language teaching, and instruction in it is now an essential element in any course of study designed as preparation for a colonial career.¹ It is perhaps relevant to ask here if governments, missions, and traders give their staff the best chance of attaining linguistic efficiency by enabling them to avail themselves to the full of the best language training obtainable at home, by allowing sufficient time at the beginning of their careers in Africa for language study, and by taking language into consideration when their people are moved from one area to another.

In recent years the technique of the study of languages has undergone important developments. Out of phonetics in the narrow sense, the analysis of speech-sounds with a precision that makes it possible to detect the subtlest differences in the utterance of sounds which to the untrained ear may seem identical, there has grown phonology—that is, a study which seeks to trace not distinctions for their own sake, but for that of their linguistic significance. It is these that are relevant when an orthography is

¹ See I. C. Ward, *op. cit.*, Supplement to *Africa*, vol. x, 1937.

devised, for the practical function of an orthography is to indicate significant distinctions to people to whom it is the normal means of communication rather than to convey to the foreign expert an exact rendering of the language transcribed. A phonological study, by taking into account the distinctions which need to be indicated in order to make the meaning clear, can often dispense with the use of new symbols by a re-allocation of those commonly used in printing; the gain in ease of manipulation in an orthography constructed in this way outweighs the lack of uniformity as between different languages in the significance of the symbols used.

The modern conception of the study of linguistics must nowadays enter fields, such as those of psychology and sociology, that lie outside the range of those formerly associated with it. This new attitude involves a concentration of interest on the spoken rather than the written word; speech must be investigated as it functions in action, and meaning must be sought not in abstract ideas but in concrete situations. The sociological approach is important in the study both of grammatical structure and of usage. With regard to the first, the aim of the modern student is best expressed in the phrase quoted by Dr. E. W. Smith from Father Wanger that it is necessary 'to look upon the grammar of an Ntu (Bantu) language from the Ntu point of view instead of pressing it into the frame of Indo-European languages'.¹ The idea that grammatical categories, corresponding to supposed universal categories of thought, can be applied to the analysis of any language should give place to the realization that the varying degrees of attention given to different aspects of the environment in different societies leads to a corresponding variety in the types of distinction which a language will express. From the point of view of structural analysis, study on these lines would be of particular importance in the production of vernacular grammars for the use of native speakers. This policy was advocated by Dr. C. M. Doke in his book *Bantu Linguistic Terminology*, published in 1935.

In the study of meaning, whether for the purpose of translation, of the preparation of text-books, or the standardization of a single language or a union language, satisfactory results depend upon studies of speech in actual use, which keep constantly in mind

¹ E. W. Smith, *op. cit.*, p. 47.

the relation of language to social facts. It has always been clear that words descriptive of social institutions peculiar to some one people cannot be adequately rendered by the mere selection of the nearest possible equivalent in another language, and the proverbs in which most African languages abound are unintelligible without comment that explains the whole context of associations in native life to which they refer. 'Context of situation must be more than linguistic; it must include an analysis of the general conditions under which a language is spoken.'¹ Such an analysis necessitates residence among the speakers of the language and a close study of their social institutions; it cannot be made by the method of asking informants to give an abstract explanation of the 'meaning' of words. The latter is the only method available to students who cannot devote their whole time to research, but its results, though they represent the first step towards mutual intelligibility between speakers of different languages, may sometimes lead to serious misunderstandings, and can never give an account of the language which will be regarded as adequate by modern standards. An instance of such a misunderstanding is the selection by a mission in Kikuyu as the equivalent of the word 'virgin' of the African term for an initiated but unmarried girl; since by local custom such girls are not required to refrain from sexual intercourse, the implications of the term to the African mind were quite other than those intended.

There is a striking difference in the degree of recognition given to the study of linguistics in America and the Continent of Europe on the one hand, and in England on the other. In the United States, Yale University has, in addition to an independent Chair of Linguistics, a Chair of Anthropology and Linguistics, the title of which explicitly recognizes the close connexion between the two studies; its holder, Professor Sapir, is distinguished for his work in both fields. In addition, Professor Boas has been lecturing for many years on linguistics at Columbia, and Dr. Andrade and Dr. Hoyer are both specialists in linguistics at the University of Chicago. It is an index of the increasing interest in this subject that Dr. M. Swadesh of Yale has been appointed Assistant Pro-

¹ B. Malinowski, 'The Problem of Meaning in Primitive Language'. Supplement to *The Meaning of Meaning* by C. K. Ogden and I. A. Richards, 1927.

fessor of Linguistics at the University of Wisconsin, and it is not irrelevant here to state that the *International Journal of American Linguistics* is now in its ninth volume. In Paris a Société de Linguistique was founded as long ago as 1866, and there is now a University Institute of Linguistics; the chair of linguistics is at present held by Professor Vendryès, who has written a standard work on problems of language. In Geneva the successors of the great de Saussure, one of the founders of modern linguistics, are Bailly, Professor of *Linguistique générale*, and Séchehaye, whose chair is that of *Grammaire théorique*. Oslo and Copenhagen also have chairs of general linguistics. In Great Britain there is only one teaching post in this subject—the Lectureship in Linguistics at the School of Oriental Studies, London. The leading work in modern linguistics in England has been the result of the personal interests of scholars in other fields, of whom Dr. A. H. Gardiner, the Egyptologist, and Professor B. Malinowski, whose chair is that of Social Anthropology in London University, are the most distinguished. No university has yet endowed a chair for the subject.

CHAPTER IV

POPULATION RECORDS

I. INTRODUCTION

WHEN empires in the past undertook the systematic enumeration of their subjects the object appears to have been mainly to secure a means of enforcing fiscal or military liabilities; that, certainly, was the intention of the best known census in history, when, in the first year of the Christian era, the Emperor Augustus ordered 'that all the world should be taxed'. Though in some countries the financial or military motive still exists, nevertheless the chief interest attaching in later times to the accurate collection of population records is based on the recognition that they afford an indispensable means of calculating the need and testing the success of the measures which a modern state is called upon to undertake in discharge of its social responsibilities. A complete application of modern methods involves the collection of data in three ways—by census enumeration, by the registration of prescribed vital facts, and by the maintenance of records of migration. A census should give information not only of the strength, but of the age, sex, and marital status of the population, with occupation and other items of fact; and if it is complete and reliable, its repetition at regular periods will suffice to indicate the increase or decrease of the population, and the rate of its movement. But between two censuses, changes in the numbers, age, sex, and possibly local distribution of the population will have occurred, and as the authorities should know with some approach to accuracy the numbers and composition of their populations year by year, the infrequent periodic enumeration needs to be supplemented by a regular recording system which is constantly in use. This need is met by the establishment of a system of vital registration under which births and deaths are recorded in conjunction with certain prescribed facts, as soon as possible after these events occur. This, however, will not explain fully all the changes between the two dates if there has been

movement in and out of the area, and a record of migration becomes necessary in addition.¹

A peculiar significance attaches to the collection of vital statistics in Africa.² Administrative questions of first importance, such as the regulation of the recruitment of labour,³ or the allocation of land for non-native occupation or native reserves,⁴ cannot be satisfactorily dealt with in the absence of correct information of the present strength of the population and of its probable future trend. Accurate vital statistics supply the information on which the efficacy of the medical organization depends, and, in particular, where such work has to be carried out with limited funds, it is essential to know where the need is most urgent; efficient planning for education depends upon knowledge of the number of children of school age; again, it is only by means of accurate population records that it is possible to settle many questions on which, at present, arbitrary assumptions are made, as, for instance, the effect on the birth-rate of native customs such as polygamy, or abstention from intercourse during a prolonged period of suckling.

II. ESTIMATES OF POPULATION

It was inevitable that in the circumstances of Africa, early estimates of the strength of the population should have been little more than guesses based on insufficient and unreliable data. For the continent as a whole, estimates of 150,000,000 or more appeared in the eighteenth century; the evidence of explorers as to the relative emptiness of the countries they traversed resulted in a reduction of this figure to a range between 28,000,000 and 41,000,000 in the years between 1851 and 1868; the publication of Stanley's reports led to the adoption of figures up to 180,000,000 or more, that accepted in 1882 being as high as 205,000,000.⁵ Estimates made at various times since 1903 have varied between 126,000,000 and 149,000,000.

Calculations made in different African territories have shown

¹ A. M. Carr-Saunders, *World Population*, 1936, p. 2; P. Granville Edge, *Vital Records in the Tropics*, 1932, pp. 13 ff.

² Cf. W. M. Macmillan, *Complex South Africa*, 1930, pp. 35, 36.

³ See Chap. XI, p. 658.

⁴ See Chap. XII, pp. 803 ff.

⁵ *Encyclopaedia Britannica*, 11th ed., vol. xxii, p. 92.

similar wide variations. Soon after the British occupation the population of Northern Nigeria was put at 20,000,000; by successive reductions it was brought down in 1906 to 7,000,000;¹ the census of 1931, however, returned nearly 11,500,000. The population of Kenya was estimated at 4,000,000 up to 1916, but a rough count in 1917 put it at 2,848,700.

At one time, the population of the Congo was guessed at about 40,000,000;² shortly before 1910 it was taken to be 15,500,000; in 1933, however, the administration accepted 9,272,558, including both enumerated persons and an estimate of others; and in 1935 the figure of both enumerated and others was stated to be 11,000,000. In the past, writers on the Congo agreed in accepting depopulation as an acknowledged fact; the Permanent Committee of the National Colonial Congress in Belgium believed in 1924 that there was a danger that the native population might 'collapse or disappear'.³ Some found the explanation in the economic policy pursued by the Free State; others viewed it as due to the introduction of diseases by Europeans and the spread of indigenous diseases through improvements in communication;⁴ others, again, as due to the general influence of European occupation—'la pénétration européenne, telle quelle, par elle-même'.⁵ The fact that population has diminished in certain parts of the Congo has been accepted by Belgian administrative authorities, and, as is shown elsewhere,⁶ has had its influence in producing that intensive study of health and labour questions which has distinguished Congo policy in recent years. It may be doubted, however, if the statistical material available is yet sufficient to enable an accurate estimate to be made of the character, or to determine the causes of the movement of population since the beginning of European occupation.

Estimates regarding French Equatorial Africa have also shown significant variations. About 1900 the accepted estimate of the population was 12,000,000 to 15,000,000;⁷ in 1910, while the

¹ C. K. Meek, *The Northern Tribes of Nigeria*, 1925, vol. ii, p. 169.

² E. W. Smith, *The Golden Stool*, 1930, p. 141.

³ *La question sociale au Congo*, 1924, p. 101.

⁴ *Bulletin officiel*, 1920, pp. 654, 656.

⁵ J. Schwetz, 'Contribution à l'étude de la démographie congolaise', *Congo*, March, 1923, p. 297.

⁶ See Chaps. XI, p. 645, and XVII, p. 1178.

⁷ *Statesman's Year Book*, 1900, p. 526.

maximum estimate was retained at 15,000,000, a minimum of 5,000,000 was also quoted;¹ an enumeration made in 1911 showed a total of 4,250,000. The enumeration of 1926 gave a total of 3,124,173.² The striking disparity between the estimates of 1900 and the result of more recent enumerations was freely used by some French critics to support their attacks on the colonial system; the cause was found by some authors in the exactions of the concessionnaires and the hardships of portage,³ others claimed that conscription and taxation had led to wholesale migration into British territories. While it may be agreed that the abuses inherent in the concession system must have had some effect on population movement both in the French and the Belgian Congo, it is not possible to claim accuracy for deductions based on a comparison between the earlier estimates and the later enumerations. The extent of the alleged emigration, sometimes put as high as 2,000,000 to 3,000,000, is not supported by the census figures of the neighbouring British territories;⁴ and it must also be realized that the concession system was in full operation only between the years 1901 and 1912, and that the levies made for forced labour⁵ have been relatively lower in French Equatorial Africa than in many other areas. That the population has rapidly decreased in the present century has, however, been accepted in authoritative quarters,⁶ though, as in the Congo, sufficient material does not exist to determine either the extent or the causes of the decline.

The Belgian Congo and French Equatorial Africa have been mentioned as cases which illustrate the unreliability of deductions based on incomplete statistical information; there are others, though they are of less striking character. For instance, the South African attitude to native problems has to some extent been influenced by the forecast made by the Director of the Union Census in 1921⁷ that, after the next fifty years, there would be a population of 6,500,000 Europeans faced by 16,500,000 non-

¹ *Statesman's Year Book*, 1910, p. 796.

² A. Girault, *Principes de colonisation et de législation coloniale*, 1927, vol. i, p. 405.

³ G. M. Vassal, *Life in French Congo*, 1925, pp. 96, 97.

⁴ Cf. figures for Nigeria and the Gold Coast, below, pp. 117-19.

⁵ See Chap. XI, p. 613.

⁶ A. Girault, *op. cit.*, vol. i, p. 456.

⁷ *Report*, U.G. 37, 1923.

Europeans, an anticipation which the census figures of 1936 have done little to justify,¹ as will be seen from the figures subsequently quoted.

A detailed study of the population statistics of Africa has been undertaken by Dr. R. R. Kuczynski, as part of the inquiries originating in the present Survey, and will be subsequently published. He estimates that the total population of the continent, shown in the *Statistical Year Book of the League of Nations* for December 31, 1934, as 145,054,000, may be as low as 138,100,000 or as high as 163,300,000; and though the margin of error is large, it is not greater than that for Asia or South America. The relevant figures regarding the population of the countries included in the areas with which this Survey deals are given in Table I.

It might be assumed that the uncertainty of African data would be less so far as the white population is concerned, but while the measure of variation is greatly reduced, there is still some lack of precision. The most recent official enumerations give the total for the continent as 4,014,424, but this cannot be taken as an accurate statement of persons of pure European stock; the returns from some territories are rough estimates only, while varying interpretations are placed on the term 'white'. In the Union, Europeans or white persons are not defined, save by exclusion from the other three classes, Asiatics, 'coloured', and native, the last-named being defined as a 'person, both of whose parents belong or belonged to an aboriginal race or tribe of Africa, and includes any person of mixed race living as a member of any native community, tribe, kraal, or location';² thus the line between Europeans and Asiatics or natives is clear, but it is less definitely marked between Europeans and 'coloured', and the classification must in some cases clearly depend on the discretion of the enumerator. In the French colonies the distinction is between 'Europeans and those assimilated to Europeans' and natives; but the former category is not uniformly interpreted in practice, the 'assimilated' being at times confined to Europeans, and at others including non-Europeans with French citizenship. It is indeed evident that in countries inhabited by different races,

¹ See W. M. Macmillan, *op. cit.*, pp. 32-4.

² Births, Deaths, and Marriages Registration Act, 17 of 1923, sec. 35.

TABLE I. Total Population of Area Included in Survey*

	Area (sq. miles)	1925	1930-1	1935-6	Density per sq. mile 1935-6
Angola	487,788	4,120,000	2,600,000	2,700,000	5.5
Basutoland	117,716	540,000	600,000	562,411	48.0
Bechuanaland	275,000	165,000	160,000	265,756	1.0
Belgian Congo	909,339	15,000,000	10,000,000	11,000,000	12.1
Cameroons, British Mand.	34,081	660,000	797,312	817,970	24.1
Cameroons, French Mand.	166,489	3,000,000	2,201,966	2,341,105	14.1
French Equatorial Africa	914,820	3,124,000	3,196,969	3,386,000	3.7
French West Africa	1,798,374	12,865,000	14,575,973	14,702,583	8.2
Gambia	372,364	230,000	199,520	197,811	0.5
Gold Coast	78,803	2,300,000	2,869,854	3,230,550	41.0
Kenya	224,960	2,640,000	3,025,000	3,084,351	13.7
Mozambique	297,654	3,120,000	3,998,000	4,100,000	13.8
Nigeria	372,364	18,475,000	19,130,859	19,106,636	51.3
Nyasaland	37,596	1,210,000	1,603,454	1,603,257	42.6
Rhodesia, Northern	290,320	2,015,000	1,309,528	1,378,000	4.7
Rhodesia, Southern	150,344	3,000,000	1,109,012	1,289,000	8.6
Ruanda-Urundi	20,535	1,595,000	3,485,000	3,387,180	164.9
Sierra Leone	27,925	235,000	1,768,631	1,890,000	67.7
South-West Africa	317,725	117,000	270,000	359,516	1.1
Swaziland	6,705	125,000	125,000	146,015	21.8
Tanganyika	360,000	4,125,000	5,063,660	5,138,080	14.3
Togoland, British Mand.	13,040	190,000	293,714	341,254	26.2
Togoland, French Mand.	20,072	747,000	747,000	763,420	38.0
Uganda	93,981	3,165,000	3,553,534	3,661,099	39.0
Union of South Africa	472,550	7,525,000	8,075,000	9,588,605	20.3

Census results—black figures.

* Figures taken from the Statistical Year-Books of the League of Nations.

precise classification must always present difficulties, and the interpretation of racial distinctions will vary according to the emphasis placed on them by political or social theories prevalent from time to time. The problems likely to arise may be illustrated by a comparison of the figures of Europeans and 'coloured' shown in the last three censuses of the Union. The Europeans increased between 1911 and 1921 by 19 per cent., and between 1921 and 1936 by 32 per cent., while the 'coloured' increased in the former period by 4 per cent., and in the latter by 41 per cent. It is probably safe to offer as an explanation of these exceptional variations that the proportion of 'coloured' who were enumerated as whites was smaller in 1936 than in 1921, but it is not unlikely that a number of full-blooded natives have been included in the 'coloured' group. Not only does the census classification present difficulty, but it is uncertain what proportion of persons of mixed ancestry and their descendants have passed into the white group, though studies on the subject would seem to show that this is not negligible.¹ The figures of European population in the territories dealt with by this Survey, as given by the official enumerations, are shown in the accompanying statement.

TABLE II. *European Population 1935-6*

Angola	30,000	Northern Rhodesia	9,913
Basutoland	1,434	Nyasaland	1,781
Bechuanaland	1,899	Ruanda-Urundi	893
Belgian Congo	18,680	Sierra Leone	718
Cameroons, British Mand.	354	South-West Africa	31,049
Cameroons, French Mand.	2,257	Southern Rhodesia	55,419
French Equatorial Africa	4,463	Swaziland	2,735
French West Africa	19,061	Tanganyika	8,455
Gambia	217	Togoland, British Mand.	43
Gold Coast	2,800	Togoland, French Mand.	418
Kenya	17,997	Uganda	1,994
Mozambique	10,000	Union of South Africa	2,003,512
Nigeria	5,246		

III. METHODS OF ENUMERATION AND REGISTRATION

Some indication of the value attaching to the population records now available may be gathered from an examination of the methods adopted both in regard to census enumeration and the

¹ See G. Findlay, *Miscegenation*, 1936, pp. 43, 44.

registration of vital statistics in the various territories dealt with in this Survey.

In the Cape, the Dutch, as far back as the seventeenth century, took a yearly census, and the British adopted the practice for several decades; regulations provided also for the registration of marriages, births, and deaths. One of the objects of the Colonial Year Books inaugurated in 1827 was to provide information on population trends in the colonies; and reports on population statistics were sent to the British Government in 1806 and in 1849. Later, this interest declined, and the census was taken at irregular periods, often in an incomplete form. Thus, the Cape had censuses in 1865 and 1875, but another was not taken until 1891; for Natal there are more or less reliable records of the white population from 1840 onwards, but the first complete census was taken in 1891; in the Free State the earliest enumeration of the white population of any value was in 1855, and the first census in 1880; while in the Transvaal an incomplete record was made in 1876, and a general, though unreliable, census taken in 1890.¹ The first simultaneous census of all provinces was taken in 1904; subsequent censuses for the Union were made in 1911 and 1921. The South Africa Act provided for a quinquennial census of the European population as a basis for the constitution of the House of Assembly; an amending Act, no. 5 of 1935, altered the census period to ten years after 1941. The Electoral Quota Act of 1937, however, extended the period for the taking of a quinquennial census to the year 1951, after which decennial enumerations are to be made. Censuses of the non-European population are not legally imperative, and in 1931, when a complete census was due, the government felt compelled by financial stringency to restrict the enumeration to that of Europeans as stipulated in the South Africa Act. A census of all races was taken on May 5, 1936, and the preliminary results are now available. The High Commission Territories were included in the censuses for 1911, 1921, and 1936; Basutoland also in that of 1904. As regards the registration of births and deaths, a different series of laws was in force in each of the provinces up to 1923; in that year, the laws

¹ A. Roberts, 'A Statistical Inquiry into the Population Problem in South Africa', *Transactions of the Royal Society of South Africa*, vol. xiii, 1926, pp. 201 ff.

were consolidated in the Births, Deaths, and Marriages Registration Act, which made registration compulsory for all races in urban areas, and for Europeans, Asiatics, and coloured in rural areas; in rural areas, registration by natives is voluntary. The law in certain provinces had previously provided for the compulsory registration of natives in these areas, but this could clearly have been merely a nominal requirement in the absence of any machinery for its enforcement. Even in the urban areas the registration of vital events is still of doubtful value in the case of natives; the urban population, except in three or four towns, includes a large proportion of temporary residents, and there is frequently a great predominance of the male sex; the number of births is therefore small in relation to the population on which the rates would be computed, and these factors would also influence the infantile mortality and general death-rates.¹

The statistics obtained by census enumerations in South Africa, which are supplemented by annual records of migration, can claim accuracy as regards Europeans, subject to the doubt arising from the inclusion of a proportion of 'coloured' in the earlier censuses. They show an increase from 1,116,806 in 1904 to 1,519,488 in 1921, 1,828,175 in 1931, and 2,003,512 in 1936. It is not, however, possible to draw reliable conclusions as to the exact movement of the native population. The census of 1904 yielded a total of 3,491,056, that of 1921 a total of 4,697,813, and that of 1936, 6,597,241. There seems, however, to be doubt as to the value of the enumeration of 1921; and it must be realized that in undeveloped areas the difficulties of enumeration are very considerable: bad weather and absence of easy communications undoubtedly affected the figures obtained in 1911 and 1921. More favourable conditions in 1936 are thought to account to a great extent for the large increase in the numbers obtained. The incomplete character of the registration of vital statistics regarding natives in urban areas and their virtual absence in rural areas make it difficult to check the assumptions which are made regarding fertility and infantile mortality, and the Native Economic Commission of 1932 emphasized the unreliable nature of the data on which common beliefs as to infantile mortality were based.²

¹ *Official Year Book of the Union of South Africa*, 1934-5, p. 957. ² See below, p. 128.

The Department of Health is urging the extension of compulsory registration to rural areas, and an inter-departmental committee has supported this proposal. It was recently discussed by the Statistical Council of the Union, which expressed the view that in introducing a system of registration the greatest care should be taken not to create suspicion in the minds of the natives; it recommended that, as a beginning, registration might be restricted to a limited area. In any case it cannot be put into effect until 1939 at the earliest.

In South-West Africa the inhabitants of the native reserves are required to report births and deaths, but the figures obtained appear to be of little value.

In Southern Rhodesia censuses were taken in 1901 (this was described as 'informal'), 1904, 1907, 1911, 1921, 1926, 1931, and 1936, the last being held simultaneously with the Union census. Although these censuses do not purport to be confined to Europeans, no complete enumeration of the native population has been attempted. The numbers returned are estimates by the native commissioners, based on the number of registered taxpayers, that is, males over the apparent age of 14, and the estimated total is reached by multiplying this number by a selected figure; multiplication by $3\frac{1}{2}$ to 4 is mentioned as one method employed.¹ Such estimates, wherever they are used, are usually found to have a large percentage of errors, for the most part on the high side. Vital statistics are stated to be unobtainable. Employers of natives were asked at the 1931 census to make returns of the numbers in their service, with the country of origin and nature of the work performed.

In Northern Rhodesia censuses have been taken in 1911, 1921, and 1931. In 1931, the European, Asiatic, and coloured populations were actually counted, but the native population was estimated only, figures being obtained by methods similar to those used in Southern Rhodesia. Registration of vital events has been introduced in 411 villages with 43,000 inhabitants, being about 3 per cent. of the population, but it is not systematically carried out.

In Nyasaland the first census was held in 1911. Non-natives

¹ *Official Year Book of Southern Rhodesia, 1926-30*, p. 568.

were enumerated, while the native population was estimated on the basis of the number of hut taxes paid, at 2·8 per hut, this figure being reached by a count made in selected villages. A new system was introduced in 1921, and followed in the two subsequent censuses of 1926 and 1931. The method adopted, based on that employed in India, was to subdivide each administrative district into enumeration areas, each in charge of a native enumerator, specially instructed in his duties. In the three weeks preceding the census each enumerator visited every village and made a count of all natives permanently domiciled there, whether or not they were actually in residence on the census day. This method—the so-called *de jure* method¹—has considerable value in that it enables the enumerator to make inquiries into details which would be impossible on the day of enumeration. In many cases the native enumerators were the same in the three censuses of 1921, 1926, and 1931, and the forms were the same with the exception that, in 1931, an attempt was made for the first time to obtain statistics of literacy. It is possible to claim for the Nyasaland census a more comprehensive scope and greater accuracy than that of a number of other territories. The report on the census also contained much useful information on the tribal groupings.² Registration of vital events has been instituted experimentally in the Fort Manning district with 35,000 inhabitants (2 per cent. of the total population), and an intensive survey has been carried out in the same area.³ A study of the distribution of population in Nyasaland, made in 1928 by Mr. F. Dixey, has reference mainly to the influence of water supply on population problems.⁴

In Tanganyika censuses were taken by the German administration in 1913 (giving a total for natives of 4,063,300), and by the British in 1921, when the total for natives was 4,107,000. It is considered that these figures are not sufficiently accurate to point to any conclusions with regard to the movement of population; the census for 1931, which gave a total for natives of 5,022,640, is regarded as appreciably superior in accuracy. The responsi-

¹ P. Granville Edge, *op. cit.*, 1932, p. 19.

² *Nyasaland Protectorate Census Report*, 1931, pp. 15–24.

³ P. Granville Edge, 'The Demography of British Colonial Possessions', *Journal of the Royal Statistical Society*, 1937.

⁴ *The Geographical Review*, 1928, pp. 274–90.

bility was left largely with the native authorities, who had already made a count of the population under their control in 1928, which is held to have been reasonably accurate. The method devised in 1931 for checking the enumeration was to carry out a count under the supervision of district officers in a number of villages selected as typical; the general agreement of the independently compiled rolls of taxpayers with the figures obtained in the population count is held to corroborate the general accuracy of the latter. An exception is admitted in the case of the Tabora District, where, the figures being suspected, a test check was made which showed that they were 'entirely inaccurate'. The official estimate of the native population in 1934 was 4,950,505, a decrease on the census figures for 1931; the estimate for 1935 raises the total once more to 5,096,178; the fluctuations probably represent errors in the estimates rather than changes in the number of people in the territory. The various tribes have been classified in groups according to the proportion of children to adults. The assumption is made that a high proportion is a sign of satisfactory conditions; the value of the assumption based on the proportion of children to adults is, however, open to some doubt. Some tribes dislike giving the number of their children, and a count in their case is of doubtful accuracy; also it is possible that a high proportion of children to adults is more likely to be evidence of a high mortality among children, than of a comparatively low infantile mortality, since the greater the proportion of children born who do not reach maturity the greater must be the ratio of children to adults. The registration of births and deaths is compulsory only for Europeans; it is optional for other non-native persons and for natives. The figures derived from registration are said to be of little statistical value and are not given in the annual Blue Book.

An intensive medical inquiry carried out over a period of four years under Dr. A. R. Lester in the Kahama District produced for that area valuable figures as to vital statistics; had examination been compulsory, as it is in the Belgian Congo, the figures would have been even more complete. A difficulty peculiar to local circumstances is the high degree to which the figures are affected by migration, which makes it impossible to draw conclusions as

to long-term trends from an inquiry extending over so short a period. A study of population distribution in relation to environmental factors was made in 1934 by Mr. C. Gillman.¹ His study showed that two-thirds of the total population are concentrated in one-tenth of the area where permanent water is available for domestic purposes, while 62 per cent. of the total area is uninhabited, largely through the absence of water. This leads the author to the conclusion that a redistribution of population is necessary in order to check the process of erosion in the densely inhabited areas, and that this must be accompanied by measures for water conservation and the tapping of underground sources.² A similar map, compiled for the whole of East Africa, has been prepared by Mr. S. J. K. Baker.³ He concludes that East Africa as a whole 'has not yet attained its maximum, nor even its optimum, population and that the present population is insufficient to make the fullest use of the natural resources at its disposal'. On the other hand, at its present stage of technical knowledge, the native population as a whole is living near the margin of subsistence, and in the over-stocked areas the density is, 'in relation to the economy of the tribal group, far above its optimum level'.

In Kenya, no complete census of the native population has been made. At the time of the non-native census of 1931, a count was made of all persons in the towns of Nairobi and Mombasa, while owners of premises and farms were asked to make returns of natives resident upon them. A total of 70,448 natives was enumerated out of an estimated population of 2,966,993. Annual estimates of the population are made by the Chief Native Commissioner on the basis of counts of huts and polls made by native counters. In a study⁴ made of the system by Mr. S. H. Fazan in 1935, it is stated that the count of married women is generally accurate, as every such woman has her own hut; old women, however, who have been exempted from taxation, are sometimes omitted: the count of men is less accurate owing to their constant movement to and from centres of employment. Owing to considerable variations in the estimates for children, district officers have

¹ 'A Population Map of Tanganyika Territory', *The Geographical Review*, vol. xxvi, 1936, pp. 353-75.

² See Chap. XV, p. 1044.

³ 'The Distribution of Native Population over East Africa', *Africa*, vol. x, no. 1, 1937, pp. 73-54.

⁴ Unpublished.

instructions to show them as 37 per cent. of the population, unless they have special reasons for submitting estimates of their own. This procedure would seem to rule out the possibility that these counts can give a close indication of the trend of population, but the reasonably accurate figures of married women, supplemented by special inquiries in selected areas, form some guide for checking the other figures. Mr. Fazan considers that, although the margin of error has been about 8 per cent., errors occur more often in the addition of numbers than in counting, and these can now be more easily checked by means of forms on which the count is entered. Rough calculations of the trend of population in the principal tribes were made for the use of the Land Commission in 1930; it drew from them the conclusion that the native population as a whole is increasing rapidly and will continue to do so during the next two decades.¹ It has been calculated, by comparing the estimates for 1925 and 1931, that the population between those years was increasing at the rate of 3 per cent. per annum. This is almost certainly too high a figure. The medical survey of the Digo District, conducted under Dr. C. R. Phillips in 1932, gave interesting vital figures, which, however, relate to too small a period to be of real value. There is no system in force for the registration of vital statistics, even for the non-native population.

Although the organization of a simultaneous complete census in Kenya, Uganda, and Tanganyika had been discussed at the Governors' Conference in 1929, only Uganda in 1931 made a native census on the lines which had been proposed. Here, censuses had previously been taken in 1911 and 1921. For that of 1931 a schedule was drawn up for the use of native enumerators, based on group units, which were to be as small as possible, and a variety of detailed information was asked for; thus five age-classes were introduced, namely, under 1 year, 7 years, 7-18 years, poll-tax payers, and aged persons. It would seem, however, that the demand for these details placed too great a strain on the resources of the native enumerators, and the returns contained many inaccuracies. It had been hoped that the results would make possible the plotting of the first native age-frequency curve in Africa; despite

¹ *Report*, Cmd. 4556, 1934, para. 1370.

the relatively low standard of accuracy in the returns, it is believed that an approximate calculation could be based upon them, if a statistician could be detailed for the work. In the meantime, however, the published statistics of the native population are limited to classification by sex, civil condition, religion, tribe. In Uganda, registration of births and deaths was introduced in 1926 for the whole protectorate except Karamoja; a more complete vital statistics form was introduced in 1930; it is not compulsory, and is carried out through the agency of chiefs. The careful analysis made in the Annual Medical Report for Uganda of 1932 shows that the vital statistics, though not without value, can be relied on only within certain recognized limits. The results are, in particular, liable to be vitiated by the fact that no satisfactory records are maintained of migrations.

For the non-native census in Kenya, Uganda, and Tanganyika a uniform scheme was drawn up by the statistician to the Governors' Conference, but was not adhered to in every detail by all the three territories. The heads of enumeration adopted by all three showed age, sex, conjugal condition, nationality or race, birth-place, religion, education of juniors, and occupation. Kenya and Uganda had a special entry for 'relationship to head of family'. In Kenya the place of permanent residence and years of residence were recorded. In Tanganyika the greater part of this information was asked for for the first time, the heads of race, civil condition, birth-place, age, religion, and education all being new. In all these territories the non-native population is classified into European, Indian, Arab, and Goan; Kenya and Tanganyika have a further classification for half-castes; Uganda includes these either under natives or 'other unclassified non-natives'. In Nyasaland non-natives are classified only into European and Asiatic.

In Nigeria recent census inquiries have been more detailed than in many other African territories; Lagos has had a decennial census since 1871; the first census taken for the whole country was in 1911, but this appears to have been of the character of a rough estimate. Ten years later there was a genuine census, accompanied by an inquiry which provided a mass of information on the history, ethnography, and anthropology of Nigeria, published

in a report of six volumes.¹ In 1931 a complete enumeration was not made, owing to the troubled political situation in the Southern Provinces. In the Northern Provinces a general census was taken, while a special 'intensive census' was also made of a number of villages. The result was to obtain 'data relating to 407,390 persons in 200 villages, unquestionably more accurate than any previous population data from Nigeria'.² In the township of Lagos a full enumeration was made.

The Government Statistician divided the results of the 1931 census into four classes as follows: the intensive census data with an error of not more than 2 per cent.; the Northern Provinces general census data with an error of not more than 5 per cent.; the data from Lagos Township with a calculated error of 10 per cent. and of the greater part of the colony and Southern Provinces with a probable error of 10 per cent.; and, finally, the data from the provinces of Onitsha, Owerri, and Calabar, where the error may be 15 per cent. to 20 per cent. Particulars of age, sex, occupation, and religion were recorded for the whole of Nigeria; the census report also gives statistics of the adherents of various religious denominations, schools, numbers of live stock, cultivated and uncultivated land, and the area and yield of different crops. In connexion with the general census, special medical censuses were taken, one in the Northern and one in the Southern Provinces. In the former 9,491 persons were examined in four villages; the second covered 11,023 persons; these recorded persons suffering from epidemic and infectious diseases, and bodily affections and infirmities. Registration of births and deaths is carried out in Lagos (where the system commenced in 1867) and in the townships of Calabar, Kano, and Port Harcourt, comprising in all about 1 per cent. of the population; but the accuracy of the system has been questioned.

In the Gold Coast decennial censuses have been held since 1891; the first two, however, did not extend beyond the colony. The original method used was to direct heads of families to drop into a calabash a grain of Indian corn for every male member

¹ P. A. Talbot, *The Peoples of Southern Nigeria* (4 vols.), 1926, and C. K. Meek, *The Northern Tribes of Nigeria* (2 vols.), 1925.

² *Census of Nigeria*, 1931, vol. i, 1933, p. 3.

and a cowrie or palm-kernel for every female. This remained in force in some areas up to 1921, but in 1931 educated enumerators were employed throughout the territory, an enumeration of houses being made some months in advance, mainly through the agency of the native authorities. The results of the census have been analysed in a valuable book by Mr. A. W. Cardinall.¹ They show in nearly all districts a striking increase of population, which has been attributed to immigration attracted by economic developments and possibly impelled by the progressive desiccation of the Sahara. Registration of births and deaths, which is in force in thirty-four towns, covers a larger proportion of the population than in most other areas—nearly 8 per cent.—and it is noteworthy that the system requires the production of a death certificate or post mortem in the case of death. A study of the figures of some areas, however, reveals birth and death rates so low as to suggest that registration in them is not systematic. Registration of births and deaths has been extended to the town of Ho in British Togoland.

In the colony of Sierra Leone the census of 1931 was the sixth regular decennial census; in the protectorate this was the fourth decennial census. At the previous censuses the figures for the native population were arrived at by estimates; in 1931 administrative officials were asked to carry out as much actual enumeration as possible as a basis for estimates of the total. During a period of three to six months a number of villages was counted in detail by the commissioners; from these counts the number of persons per house was ascertained and used as the basis for calculating the population of the rest of the territory from house tax lists. Information bearing on the 'social and moral well-being of the population' was sought by the circulation of a questionnaire to medical officers, relating to such matters as the fertility of women, the effect of the age of marriage, of excessive intercourse and polygamy, the causes of infant mortality, and the adequacy of the normal native diet. None of these questions, however, can be answered without ample objective data; opinions, particularly on such matters as the effects of unfamiliar sexual customs, are of little value unless supported by facts, and doubly doubtful if they are offered in explanation of phenomena whose existence is

¹ *The Gold Coast*, 1931, pp. 148 ff.

itself merely assumed. A detailed study of questions of this type, extending over a comparatively small area, would certainly have had more scientific value than impressions recorded in reply to general questions of the nature of those indicated. A system of registration of births and deaths is in force throughout the colony area, comprising 100,000 inhabitants, or 6 per cent. of the total population; it is stated to be complete in Freetown, with 60,000 inhabitants, but is of doubtful value elsewhere. In the protectorate there is a system of permissive registration. Decennial censuses have been taken in the Gambia since 1881; registration is in force in Bathurst, with 14,000 inhabitants, forming 7 per cent. of the total population. The registration of deaths is reported to be complete, but that of births inadequate.

In the Belgian Congo demographic questions have attracted much attention owing to the anxiety felt regarding the decline of the population, a matter to which reference has been made on page 105. No regular census has, however, yet been taken, the administration relying for its population statistics mainly on the system of *recensement sur fiches individuelles*. This method contemplates the maintenance of a complete card index register at the head-quarters of each administrative division or *territoire*, compiled as the result of annual visits of the *agents territoriaux*¹ to each native *circonscription*; it involves transfer from one division to another of the *fiches* of those who are found to have changed their residence. It is compulsory for every adult of either sex to present himself for registration and obtain a *livret d'identité*. This system, if extended to the whole territory, and systematically operated, would have great statistical value; but in practice it has not yet been found possible to cover the whole territory nor to maintain the records with the requisite regularity, though the system is being gradually extended and in 1935 the claim was made that it now covers 91 per cent. of the population. In some hundred *circonscriptions* a rough register is kept by clerks of native courts or other educated natives; in some *chefferies*, particularly in the Lower Congo, native authorities have been able to institute card registers. It is recognized by the administration that the results cannot be said as yet to afford a complete record of the population; indeed,

¹ See Chap. VI, p. 244.

M. Ryckmans¹ has observed that 'le résultat est que pour avoir voulu posséder un recensement parfait, nous n'avons même pas un dénombrement approximatif'. Recently, therefore, the administration has adopted a different approach to the study of population movements. Sample centres, as far as possible typical of a large area, are chosen where counts are made each year; by 1935 studies of this kind covered one-sixteenth of the estimated total population. From these detailed studies a coefficient is calculated for each region to four decimals, and the estimated population for the whole region is obtained by multiplying the number of tax-payers by this figure.

In the course of their visits of inspection, made every six months, the medical units engaged in the prevention of sleeping sickness examine the whole population of the villages treated, who are obliged to present themselves for examination, and names, sex, age, and profession are recorded on cards, in addition to medical details. Unfortunately, from the point of view of comparability with the administrative figures, the groups dealt with are apt to overlap political boundaries; in any case these figures refer to non-typical groups. Since 1931, however, they have been supplemented by the work of the great organization for intensive medical work, the Queen Elizabeth Fund (Foréami), whose general medical work in the Lower Congo covers a total population of 350,000. The large medical staff maintains a vital record of the population sufficient to allow comparison of one year with another.² Another source of demographic statistics is the register of baptisms, marriages, and burials kept by the Christian missions. These cover what is at present a non-typical section of the population; nevertheless, for this section, whose relative importance will almost certainly grow, the statistics give interesting information on such questions as the age of marriage, longevity, and infant mortality. The regular process of registration of births and deaths applies to all Europeans³; natives have the right of *immatriculation* under the law of *État Civil*, and in that case the law regarding births and deaths applies to them; in 1935 there were 4,520 entries

¹ *Démographie congolaise*, *Africa*, vol. vi, no. 3, 1933, p. 245.

² Cf. Dr. G. Trolli and Dr. Dupuy, *Contribution à l'étude de la démographie des Bakongo au Congo belge, 1933, 1934*.

³ *Codes et lois du Congo belge, 1934*, pp. 524-6.

of births, deaths, and marriages; the range of this process is, therefore, small.

In the mandated territory of Ruanda Urundi the original estimate of a total population of 5,000,000 has, as the result of a number of sample surveys, been restated as 3,387,180 in 1935. A special inquiry into infant mortality statistics made in 1934 showed that the maximum infant mortality rate of the most primitive regions—about 10 per cent.—compares favourably with many tropical territories. In Ruanda, by 1935, out of an estimated native population of 1,685,283, a total number of 1,279,096 had been individually registered by the medical census. In Urundi this had covered 219,856 persons out of an estimated total of 1,700,300.

In the earlier history of the French colonies questions relating to the strength of the population attracted much interest. A perusal of the *Annales maritimes et coloniales*, and the monumental work *Notices statistiques sur les colonies françaises* (1837-40) with their sequel, the *États de population* from 1838 onwards, shows that these efforts, while not fulfilling all the expectations formed of them, nevertheless provided the government with considerable demographic information. With the expansion of the territory occupied, interest lessened, and to-day the French African colonies are inadequately equipped with population records. In the present century enumerations have been made at five-year periods, but though the figures relating to French citizens may be taken as correct, accuracy is not claimed for enumeration of the rest of the population. It has been admitted that the figures are the result of *évaluations assez imparfaites*.¹ The five-yearly enumerations are based mainly on the tax registers, prepared for the most part on information supplied by chiefs; the figures of non-taxpayers are estimates only, and there is no information regarding age-classes and the like. M. Brévié, the late Governor-General of French West Africa, has called attention to the lack of adequate population figures; he remarks that in their absence 'les mesures d'ordre administratif et social manquent d'assise, et on calcule mal les incidences. Ce n'est que par une statistique, judicieusement et régulièrement tenue à jour, que l'on peut connaître

¹ *Annuaire statistique de l'Afrique occidentale française*, 1933-4, p. 19.

l'économie d'une Colonie, je dirai même sa psychologie profonde'.¹ He indicated in 1933 that a number of officers would be added to the 'local' civil service as *agents recenseurs*, who would complete the work in each colony in five or six years, and thereafter supervise the operation of the system; but the establishment so far provided appears hardly adequate for the maintenance of a method such as that contemplated. In French West Africa the registration of vital events is regulated by an *arrêté* of May 29, 1933 (amended in 1934). A centre for registration exists at the headquarters of those administrative subdivisions where natives are able to register if they wish. Registration is, however, compulsory for certain classes of natives, such as the inhabitants of municipalities, members of the fighting services, government officials, holders of trading licences, and native chiefs. No similar steps have been taken in French Equatorial Africa, where population figures appear even less reliable than in French West Africa. The French law makes registration of births and deaths compulsory for French citizens, that is about 2 per cent. of the total population. In Togoland sample surveys have been made annually for some years by medical officers, and it is probable that these give more accurate figures than the general census. Voluntary registration, similar to that in force in French West Africa, and a system of compulsory registration in the large urban centres were introduced under the *arrêtés* of November 17, 1921, and November 20, 1923, but have little statistical value. In the French Cameroons the results obtained by the five-year census, conducted on a system similar to that of French West Africa, have been subject to considerable variations. That of 1924, giving a total of 2,771,132, was said to be subject to the suspicion that chiefs had a general tendency to conceal names of taxable persons 'for the sake of a clandestine profit', and the results were held to represent a possible inaccuracy of 10 to 20 per cent. for certain regions recently occupied. A census subsequently taken in 1926, however, showed the native population to be only 1,877,113, and the administration then declared prior figures to have been wrong. The next census of 1931, which was in itself said to be incomplete, showed a total of 2,223,802, and it is difficult to decide between

¹ *Discours à l'ouverture de la session du Conseil de Gouvernement*, 1933, p. 52.

the merits of the three enumerations. In one district at least a card index system, somewhat on the Belgian model, has been attempted. Voluntary registration of native births, deaths, and marriages was introduced by an *arrêté* of June 30, 1917, and this was replaced by an *arrêté* of July 15, 1930, in turn repealed by that of March 15, 1935, which made registration compulsory in certain areas. There are fourteen centres in which the voluntary system of 1917 is still in force; they recorded in 1935 only 381 events; in the 309 centres brought under the 1930 procedure, 143,720 events were recorded. The registration is carried out by the native chiefs, and the extent to which it can be considered as complete is doubtful.

IV. GENERAL OBSERVATIONS

The survey of existing statistical data made by Professor A. M. Carr-Saunders and Dr. R. Kuczynski has led them to the conclusion that we have not at present adequate material on which to calculate the present course of population movement south of the Sahara. The former¹ considers that there is some evidence that Africans have declined in number during the eighteenth and nineteenth centuries; not only did they bear the heavy direct and indirect losses of the slave trade, but certain diseases have found their way to Africa which were not there before, and others have spread owing to increased means of communication. These conclusions are significant in the light of estimates of the supposed population capacity of Africa, to which considerable publicity has been given. Two German calculations, based apparently upon theoretical assumptions regarding the amount of land required to support certain standards of life, put the capacity at 2,300,000,000² and 1,650,000,000³ respectively. These figures assume a higher capacity than that of any other continent and a potential capacity of 50 per cent. more than the present total world population. Another estimate places the capacity of Africa south of the Zambesi at 82,000,000.⁴ It is doubtful whether much value can be

¹ Op. cit., pp. 34-5, 301.

² A. Penck, quoted by Prof. J. H. Wellington in Presidential Address to Section B of the South African Association for the Advancement of Science, *South African Journal of Science*, vol. xxxiv, Nov. 1937, pp. 29-60.

³ A. Fischer, *ibid.*

⁴ G. Taylor, *ibid.*

attached to such statements in view of the present state of knowledge. At the moment we can only say that the population is 'probably not decreasing; it may very likely be about stationary; it is not impossible that it may be increasing, but if so the rate of increase is certainly slow'.¹ Dr. Kuczynski² agrees that it is impossible to say whether the native population of Africa has increased or decreased in numbers during the last hundred years. As for our present knowledge, there are tribes of which we may safely predict that, unless conditions improve, they may die out; there are probably others that are progressing; but for the majority it is at present impossible to say with confidence whether they are reproducing themselves or not, and in no case is it possible to state accurately the balance of births and deaths.

The varying degree of accuracy attained by the African population records is not due only to practical obstacles; the administrations themselves have shown an unequal measure of interest in census operations. The difficulty of carrying out a complete census in African conditions is obvious; the expense involved is heavy; there is, as a rule, a paucity of staff available; the physical obstacles presented by the counting of a scattered population are considerable, and governments have had to overcome opposition based on customs and superstitious beliefs.³ Some natural suspicion has been aroused by an operation which has had a traditional connexion with the imposition of tax. In most of the territories, however, the chief obstacle to an improvement of the standard of accuracy would now seem to lie in the lack of educated personnel. That India has been able to make, since 1872, a series of censuses which give a reasonably accurate knowledge of its population,⁴ is due to the fact that it has always been able to call on the assistance of a large staff of literate enumerators; in view of this, it has been immaterial that only 18 per cent. of its population is literate. With the spread of education a more comprehensive and more accurate count should become possible in Africa.

It is at the same time open to question whether, in circumstances in which any system of registration of births and deaths

¹ A. M. Carr-Saunders, *op. cit.*, p. 303.

² *Population Movements*, 1936, p. 6.

³ See P. Granville Edge, 'The Demography of British Colonial Possessions', *op. cit.*, pp. 10 ff.

⁴ A. M. Carr-Saunders, *op. cit.*, p. 269.

must be of slow growth, and migration figures are difficult to record, the ten year period between censuses is not too long; the French, though their census is for the most part based on estimates only, have nevertheless seen the necessity of conducting it at five year intervals. At present many of the administrations, in presenting their annual reports, base their calculations of the strength of the population on the figures of the last census, with an assumed factor of annual increase. The computations are, as a rule, based on insufficient data, and are of no statistical value; they are frequently even deceptive.

There is a lack of conformity in census procedure which makes the results difficult of comparison, not only as between different areas, but often within the same territory. A rigid uniformity is admittedly neither obtainable nor desirable; but there can be little justification for some of the variety which, as has been shown, characterizes the census procedure of many of the British colonies; to take only one instance, the term 'children' may be said to include persons of any age up to that at which they become taxpayers, in itself a variable figure. It would not be difficult for a committee of experts from the different colonies to establish the principles of procedure in regard to such material points as the classification of the population by country of birth, sex, age, and marital condition. Some greater degree of uniformity could also be obtained in recording racial origins, a point of much importance in regard to the classification of Europeans, Asiatics, or 'coloured', while a record of place of origin of natives would supply some of the information which would normally be derived from migration records. It is, moreover, of importance for statistical purposes that a census report should always contain clear indications of the manner in which figures have been obtained or estimated; it is, for instance, often difficult to ascertain the factor employed in calculating the total population on the basis of taxpayers, or the basis chosen in estimating the number of children.

Wide as is the field for improvement in systems of enumeration, it is, perhaps, at the moment even more important to attempt an extension of the registration of vital events. The extent and development from year to year of vital registration in British territories can be studied in the annual supplements to the

Tropical Diseases Bulletin, published by the Bureau of Hygiene and Tropical Diseases, which gives the year's record of vital statistics for all the British dependencies. At present, birth registration is confined to about 7 per cent. of the native population of the areas included in this Survey, and even here it is far from systematic. The difficulty in the extension and enforcement of the system is admittedly great; it is only in recent years that registration has taken a complete form in countries within the sphere of European civilization, and it is characteristic that India, with an administrative organization more extensive than that of any of the African territories, has not yet been able to legislate for universal compulsory registration, while such vital records as it is possible to make are officially considered to be 20 per cent. defective. A wide extension of the system, therefore, can hardly be looked for in the present conditions of Africa; and it is, indeed, preferable that an effort should be made to secure registration in those selected areas where it can be consistently applied and fully supervised. Such an application of the system might not yield figures which would provide general indices of birth and mortality rates; but the results would afford reliable evidence, of a kind now wanting, on many problems of African population statistics, and would be a useful step towards the introduction of more comprehensive statistical schemes.

African women are often credited with great fecundity,¹ but the assumption needs to be tested by fuller statistics than we now possess. In numerous areas no record of births is made; and as has been shown above, where records are kept, they are not always systematic, and refer only to a small percentage of the population. The fact that the calculated birth rate in these areas, averaging between 18 and 33 per thousand, is higher than that of many European countries but lower than that of India, cannot be made the basis of any generalizations as to the fertility of African populations. The registration of deaths, in the limited area in which such records are made, is possibly more complete than that of births, though it is likely that the deaths of infants and females often escape registration; the result is seen in the fact

¹ See, for instance, *Census of the Native Population of Tanganyika Territory, 1931, 1932*, p. 3.

that the computed figures for different areas show erratic variation. There is, in particular, an absence of data on which to judge of the correctness of the assumptions which have from time to time been made of the extent of infant mortality. There has been a general consensus of opinion that the ratio is unusually high; but estimates, founded on incomplete observation, have at times presented figures which appear clearly inconsistent with the state of the population as shown by enumerations. The South African Native Economic Commission of 1932¹ states that it received estimates for different areas ranging between 237 and 500 per 1,000; in Kenya an estimate was on one occasion given of 400 per 1,000.² The figures recorded for the British Tropical African colonies as a whole give 172·8 per 1,000 births;³ the Nyasaland selected area gave 154·6 per 1,000; the Uganda figures give 356·5 for the northern province, falling to 72·1 in Entebbe;⁴ special inquiries made during the Gold Coast census of 1931 showed a rate of 170·6; the Foréami survey in the Lower Congo⁵ gives 175·4 per 1,000 for children up to one year old,⁶ which is higher than that of any European country except Roumania. These figures, though not without value, are insufficient to afford any index of general rates of infant mortality. In the absence of an adequate system of vital registration, it is equally difficult to judge of the truth of assumptions made regarding the effects of certain African social customs, such as polygamy. The Commission for the Protection of the Natives in the Congo was so convinced of the effect of polygamy in retarding the growth of population that in 1920 it urged the Belgian Government to take gradual steps to abolish it;⁷ the truth of this assumption, however, still needs scientific examination. A population survey, undertaken by a District Officer and his wife (Mr. and Mrs. A. T. Culwick) in Tanganyika in 1937, showed that polygamy did not appear statistically to affect fertility. This survey also yielded valuable figures regarding infant mortality and sex ratios. Another aspect of the population question which needs investigation is the

¹ *Report*, U.G. 22-32, para. 795; see also W. M. Macmillan, *op. cit.*, pp. 36-9.

² *Report of the East Africa Commission, 1925*, Cmd. 2387, 1925, p. 54.

³ P. Granville Edge, *op. cit.*, 1937, Table Ia.

⁴ *Ibid.*, p. 9.

⁵ See above, p. 121.

⁶ Dr. G. Trolli and Dr. Dupuy, *op. cit.*, p. 72.

⁷ *Rapport, Bulletin officiel*, 1920, p. 638.

effect of labour emigration, more especially in the large areas in which some 50 per cent. of the men are absent on the average. Both numbers and quality may be affected, since the unfit stay at home. It has been suggested that should it be possible to extend the system of birth and death registration, greater uniformity of practice would be achieved by an inter-territorial agreement such as has been proposed for census enumeration. It is, in particular, necessary to place still-births in a separate category, and to distinguish deaths of residents from those of strangers.

The difficulty of improving enumeration and registration has led of recent years to increased importance being attached to the method of sample survey, to which references have been made in previous parts of this chapter. This method appears to have been most successfully used in the Belgian Congo. Sample surveys have their own value, since they always add something to the current knowledge of the locality which is needed for administrative and public health work; but for the purpose of establishing population records their use is impaired by the fact that they apply only to selected groups, and that inquiry is made only regarding births and deaths occurring during the preceding twelve months; moreover, the quality of the information obtained depends largely on the personality of those who conduct the inquiry. Inquiries made during medical surveys, and figures obtained from hospital records, have their value for public health purposes; but full use cannot be made of them in the absence of data regarding the normal movement of population such as are provided by an efficient system of registration.

CHAPTER V

POLITICAL AND SOCIAL OBJECTIVES

A BRIEF review of the varying political and social ideas which have influenced those concerned with the development of African territories may serve to throw light on the systems of government to which they have given birth, and which are discussed in the next chapter.

The history of political ideals in South Africa has been that of a conflict of attitudes towards the relation between Africans and Europeans, typified by the contrast between Cecil Rhodes's phrase—'Equal rights for all civilized men south of the Zambesi'—and the clause from the original constitution of the Transvaal—'There shall be no equality between black and white either in church or state.' The Great Trek northward of the Boer farmers which began in 1836, and which led ultimately to the creation of the Transvaal and the Orange Free State, was impelled partly by a determination to acquire land which the British Government of the day hesitated to annex, partly by dissatisfaction with the economic policy of that government, but partly also by the principle involved in the recognition of legal equality between all sections of the population and in the emancipation of the slaves. This last measure caused little material hardship to the Boers, but outraged their sense of what was fitting in the relations between black and white. Opinion in Great Britain, however, has always regarded the grant of the franchise to natives in the Cape as the symbol of a policy which offered equal opportunities with the white man to any native who could attain his standards of civilization.

In 1912 a political philosophy, based on the 'segregation' of natives and Europeans, was put forward by the Labour Party. This policy assumes the permanent maintenance of the white community in a position of political and economic supremacy, and the preservation of the standards of European civilization by reducing the contacts of the two races to the minimum which the economic system necessitates.¹ General Hertzog, the present Prime

¹ See Chap. IX, pp. 346 ff.; Chap. XI, pp. 682 ff.; and Chap. XII, pp. 718 ff.

Minister of the Union, came into power on this programme in 1924, and his internal policy has been designed to complete a process initiated by the Land Act of 1913, which divided the whole territory of the Union into native and non-native areas and established the principle that the residence of natives outside the scheduled reserves is only justified if they are in European employment.¹ Economic segregation in the non-native areas is effected by measures which assign the native his place in unskilled labour, reserving skilled employment for the white man; in practice, the 'civilized labour policy' goes further and involves the reservation for white labour of certain occupations which cannot strictly be described as 'skilled'.² The colour-bar policy, however, only works effectively where there are big industries or mines, more especially where white labour is organized. The number of natives residing in urban areas is to be rigorously controlled and their locations kept separate from the European residential area.³ It is at the same time assumed in South Africa, as in Southern Rhodesia, which has adopted the same principles, that within the sphere of the native reserves the professions and skilled trades shall be fully open to Africans.⁴ The Union Natives Taxation and Development Act of 1925 embodied the principle that native development should be financed from revenue obtained from natives.⁵

The political system recently instituted by the Representation of Natives Act of 1936 rests on the negation of any extension of the native franchise, an attitude justified by General Hertzog on the ground that under a constitution which admits the possibility, however remote, of a native majority in the electorate, the native is 'a danger to the white civilization in South Africa'.⁶ Though the Cape franchise is retained, it is held on a communal basis, the number of native representatives not being calculated in any proportion to the population, while for the rest of the territory Native Electoral Colleges elect four Europeans as representatives to the Senate. There is also a Natives Representative

¹ See Chap. XII, pp. 721 ff. ² See Chap. XI, p. 682. ³ See Chap. IX, p. 500.

⁴ The Hon. G. M. Huggins, 'Towards that Central African Dominion', *East Africa*, vol. x, no. 513, 1934, p. 909.

⁵ See Chap. IX, p. 354.

⁶ *Joint Sitting of Both Houses of Parliament*, Feb. 13-Apr. 7, 1936, c. 529.

Council which, under statute, must be consulted on all measures affecting native interests.¹

South Africa has favoured the acceptance of this policy in other parts of the continent where white settlement is possible. General Smuts in 1930 looked forward to the evolution of a common policy for all British African states from Kenya to the Union through a series of annual conferences.² The military as well as the political implications of this attitude were explicitly accepted in a series of articles published in the *Johannesburg Star*, in 1937, with the approval of Mr. Pirow, the Minister for Defence, in which the writer said: 'The Union has inescapable ties of common interest with all areas in Africa where white populations are endeavouring to establish a permanent home. The occupation by any strong foreign Power . . . of any part of that territory would be a direct threat to the safety of the Union.'³ The areas referred to are those in Central and East Africa—the Rhodesias and Kenya—where European settlement has taken place on a considerable scale; and, as is shown in the chapters dealing with land, the urban native,⁴ and labour, Union policy has strongly influenced Southern Rhodesia and has to some extent determined the attitude of European settlers in Kenya. There is a probability that the colour bar may be pressed for on the copper mines of Northern Rhodesia as white labour becomes organized under Union influence. Most of the British territories in tropical Africa, however, are climatically unsuitable for white settlement, and their development has been characterized by a different philosophy. Of these the West African dependencies have an older history of contact with European civilization, and in them was evolved the policy now made applicable to the predominantly native territories in the east.

The British settlements on the West African coast were a legacy of the slave trade, which, so far as British legislation and the British navy were able to enforce its suppression, was abolished in 1807. The settlements remained; the humanitarian movement saw in their development as centres of legitimate trade the means of establishing an interest which would have strong motives for

¹ See Chap. VI, p. 153.

² *Africa and Some World Problems*, 1930, pp. 66 ff.

³ *The Times*, May 19, 1937.

⁴ See Chap. IX, pp. 496 ff.

co-operating in the abolition of slaving and slavery. Thus at an early date that intimate connexion between idealism and commerce was established which has exposed African administrations to the easy cynicism of those who see in every declaration of interest in the African's welfare the veiled intention to secure benefits for the mother country.

In West Africa action against the slave trade was followed by the adoption of a policy pointing to a general withdrawal of British political influence. In the Gold Coast merchants were notified in 1827 that they remained at their own risk, and from that date until 1843 the administration of the coastal forts was in the hands of a committee of London merchants. At the mouths of the Niger the British Government maintained no authority, other than that of a naval squadron for the suppression of slave-trading, until the appointment of Mr. Beecroft as Consul in 1849. Lagos was annexed in 1861 solely because only by annexation could the slave-smuggling which was rampant there be stopped. In 1865 a Select Committee of the House of Commons advocated complete withdrawal from the coastal trading-stations at the earliest possible date. In the Gold Coast, however, the barbarous practices of the Ashanti kingdom were held to be intolerable, and in 1874 the Ashanti War marked the beginning of British penetration inland. In what later became Nigeria, this penetration was due to the enterprise of Sir George Goldie,¹ founder of the Royal Niger Company, which from 1886 to 1899 was concerned in the extension of British influence through commerce up the rivers Niger and Benue, the policing of the river against attacks from natives, and the suppression of the slave trade. The company's instructions were to maintain freedom of trade in accordance with the colonial policy of the British Government, but this freedom was not introduced in practice until the government made itself directly responsible for administration. Sir George Goldie adopted the policy of administration through native rulers which later came to be known as indirect rule,² and in doing so received the support of the early anthropologist, Miss Mary Kingsley.³

This policy was effectively developed by Lord Lugard when he

¹ D. Wellesley, *Sir George Goldie, Founder of Nigeria*, 1934.

² See Chap. IX, p. 416.

³ See Chap. II, p. 40.

was appointed High Commissioner of Nigeria in 1900, and its implications as a theory of native administration were elaborated by him in a series of *Political Memoranda* and in many published writings.¹ The principle underlying this policy, the validity of which is still challenged by other colonial powers, notably France and Italy, is that native institutions are in themselves of value as agencies of government, and that a replica of European institutions in Africa is not the aim of policy most to be desired even in a distant future. In Lord Lugard's view its political aspect must be complemented on the economic side by a form of development which would help to render the African independent of wage-labour and thus enable the village life, which is the basis of native institutions, to continue. As the policy has been developed in practice, emphasis has shifted from the preservation of native institutions to their development for new functions, and it is beginning to be recognized that these institutions, if they are to play their part in the modern world, must undergo changes which may eventually make them unrecognizable. In the other West African dependencies a similar attitude towards the advantages of a development based on native production was accompanied by a mere recognition of native authorities, without the assumption of any power which would make it possible to utilize them in the introduction of measures held to be desirable in the interests of native advancement.²

The system of indirect rule is regarded by its exponents as a better starting-point for an evolution towards self-government than any other yet devised by British administrations. Sir Donald Cameron, when Governor of Tanganyika, expressly stated that in no other way could the obligation, implied in the mandate, to 'encourage such an evolution of peoples 'not yet able to stand by themselves', be carried out. The political traditions of Great Britain involve the assumption that self-government implies representative parliamentary institutions, and this is held also by the majority of educated Africans.³ It is implicit in the philosophy of indirect rule, however, that the nature of the political

¹ *Political Memoranda*, 1918; *The Dual Mandate in British Tropical Africa*, 1929.

² See Chap. IX, pp. 465 ff.

³ See M. Perham, *Native Administration in Nigeria*, 1937, pp. 356 ff.

forms which may ultimately be involved should not be prematurely defined, and it is possible that a development deliberately based on African institutions may lead to some new type of self-governing organization.

The acquisition of the British tropical African territories took place in a period when British economic policy was dominated by the principles of free trade, and the principle of the 'open door' was conventionalized by international treaties in Nigeria and the Gold Coast, Kenya, Uganda, Zanzibar, Nyasaland, and part of Northern Rhodesia; a similar policy has been necessitated by the terms of the mandate in Tanganyika and the British Cameroons. But these territories are now feeling that they would have a better chance in the search for markets if they had a free hand in negotiations with other countries while maintaining British preferences. Where no treaty limitations are in force, the trend of policy since the Ottawa Agreements of 1932 has been to give a preference to British countries.

In those British East African territories where European settlement has taken place an opposition has frequently revealed itself between the aims of local opinion, which has favoured the South African segregation policy, and public opinion at home, which has taken the view that native interests deserve more explicit consideration. The local European communities hold that the principle of devolution, culminating in full responsible government, which has been followed by Great Britain in her relations with other British peoples overseas, is applicable also in their case. But the British Government have held that in territories where the native population form the great majority this principle must be subject to modification. Their declared policy in regard to such territories has been formulated in a series of statements which, though made with special reference to Kenya, express a general philosophy. The Devonshire White Paper of 1923 stated that

'primarily Kenya is an African territory, and His Majesty's Government think it necessary definitely to record their considered opinion that the interests of the African natives must be paramount, and that if and when those interests and the interests of the immigrant races should conflict, the former should prevail. . . . In the administration of Kenya His Majesty's Government regard themselves as exercising a trust on

behalf of the African population, and they are unable to delegate or share this trust, the object of which may be defined as the protection and advancement of the native races.¹

This conception of the position of the imperial government as the impartial arbiter between communities whose interests might come into conflict was elaborated by the Hilton Young Commission of 1929 as the basis of the constitution which they outlined for a federation of the three East African territories,² and the necessity for the preservation of its ultimate authority in matters affecting native interests has been repeatedly emphasized. At the same time, it has been felt desirable to make it clear that the paramountcy of native interests is not to be interpreted as justifying neglect of the vital interests of the European community, and that the ultimate trusteeship of the imperial government does not preclude the grant to that community of a share in the government of territories which they have made their home. The Churchill White Paper of 1927 dealt with these two points by enunciating the principle of the 'dual policy' of economic development—elsewhere defined as that of increasing native production in the reserves *pari passu* with that of European plantations—and the government's 'desire to associate more closely in this high and honourable task [of trusteeship] those who, as colonists or residents, have identified their interests with the prosperity of the country'.³ A more specific definition of the type of development involved in the paramountcy of native interests was given in the Passfield White Paper of 1930, which accepted the principle laid down by the Hilton Young Commission that 'the creation and preservation of a field for the full development of native life is a first charge on any territory', but declared that this is not 'incompatible with the common duty of any government to promote the development of the resources of the territory and the prosperity of its inhabitants, including the immigrant communities within it'.⁴ The type of development envisaged should be the adaptation of native institutions to the purposes of local self-government, with

¹ *Indians in Kenya*, Cmd. 1922, 1923, p. 9.

² *Report of the Commission on Closer Union of the Dependencies in Eastern and Central Africa*, Cmd. 3234, 1929, pp. 84-5.

³ *Future Policy in regard to Eastern Africa*, Cmd. 2904, 1927, p. 7.

⁴ *Memorandum on Native Policy in East Africa*, Cmd. 3573, 1930, p. 5.

the possibility that native and settled areas might eventually be placed under separate administration; the improvement of native hygiene, standards of life, and general education; and the development of native production in a way which would make the native effectively free to choose between independent cultivation or wage labour as a means of earning his cash requirements. As regards the political future of Kenya, Lord Passfield stated that dominion status was the ultimate goal, but could not be attained until the native community were able to participate in self-governing institutions.

Opinion among the European communities in East Africa held that this statement implied a certain failure to appreciate their problems and legitimate interests, and the Joint Committee on Closer Union discussed their criticisms and included in their report a statement which may be taken as the most authoritative interpretation so far given of British policy on this question. They conclude that the European community should have a right to effective representation, and to protection against policies which would fundamentally change the economic conditions on the basis of which they settled in the country. Pointing out that the principle of paramountcy was enunciated in relation to specific points, particularly in connexion with land and labour questions, on which a direct conflict of native and non-native interests might arise, they add that 'the doctrine of paramountcy means no more than that the interests of the overwhelming majority of the indigenous population should not be subordinated to those of a minority belonging to another race, however important in itself'.¹

The early development of the East African territories was characterized by a belief that their future lay with large-scale European agriculture, and that policy should concentrate on encouraging settlement, making land available, and stimulating the flow of native labour. It is, however, now recognized in some areas at least that the high cost of European enterprise makes it uneconomic where the commodities produced have to meet the competition of native production in an African market or can only command a low price in an external market. In all these terri-

¹ Joint Committee on Closer Union in East Africa, *Report*, H.C. 156, 1931, para. 73. See Chap. VI, pp. 167-9.

tories native education, the encouragement of native production, and the development of native institutions for local self-government have been the object of increased attention from the imperial government in the years from 1925 onwards. No industrial colour-bar exists in the British East and West African territories, but the principle of financial segregation in force in the Union seems to have been implicit in the minds of the European community of Kenya when they agreed to the imposition of an income tax in 1937 on the understanding that they should not be asked to contribute to the extension of native services.¹

The philosophies which lie behind the administration of Uganda and Tanganyika are akin to those reflected in the development of Nigeria, and in the case of Tanganyika were inspired by them.

The most striking contrast between the colonial policies of France and Great Britain lies in the centralizing tendency which inspires the relations of France with her colonial empire. Economically the aim is that the mother country and the colonies should form a unit: and France has at all times pursued a protectionist policy in all her territories except those in which she was debarred by international agreements or by the mandate. Politically she appears to look to a future in which the advance in civilization of the subject peoples will be recognized not by the creation of local representative institutions but by fuller representation in the central government. This centralizing attitude is bound up with the 'assimilationist' theories which had their origin in the equalitarian doctrines of the French Revolution and which remain at the root of French colonial philosophy. The development of political institutions in the French colonies, described later,² has kept the institutions of the home country as its model. The grant of the franchise to the Senegalese remains the fullest practical application of the theory that all the children of France are equal. This theory was readily accepted as a basis of policy at the time of the *sénatus-consulte* of 1854, when the colonial empire was confined to small areas which had already been long under European influence; but with its extension in the years following 1890 to great areas the population of which had little previous contact with European civilization, the principle of assimilation gave way to that of

¹ *The Times*, Dec. 12, 1936.

² See Chap. VI, pp. 185 ff.

'association', which was first defined by M. Jules Harmand in 1910 and later by M. Albert Sarraut. This theory, as first put forward, appeared comparable to the theory of indirect rule; the colonizing power was now to adopt, as a principle, a well-watched and well-directed conservation of the institutions of the subject people and a respect for its past.¹ In M. Sarraut's works the aspect of the policy which its name indicates, the 'association' or 'collaboration' of the native *élite*, who have appreciated and accepted the standards of civilization, in the work of colonial development, receives more emphasis.² Few French colonial writers would extend the principle of respect for native institutions to the point where they were regarded as worthy of maintenance in the face of changed conditions; the respect which is inculcated is rather a sympathetic tolerance during the period which must elapse before their inevitable disappearance.

Economically France adopted in the early days of Equatorial Africa the system of development by monopolist concessions, which was found to be the only means, consistent with the provisions of the Berlin Act, by which commerce could be kept in the hands of the colonizing power; but this method was soon found to be unprofitable, and most of the concessionaire companies willingly agreed to the retrocession of their rights before the end of the period for which they were made.³ Policy in French West Africa never relied on the concessionaire system, but sought to develop the country by reliance on native agencies. That is also the reigning policy in the French Cameroons.

A general philosophy of economic development for the colonial empire was formulated by M. Sarraut when, as Colonial Minister in 1922, he conceived a planned development in which each colony should contribute its quota of the product for which it was best suited, while at the same time means of transport were to be improved on a large-scale plan. The policy of association was closely bound up with this scheme; the native *élite* had a definite part in the expansion of production. The division of the educational system into two programmes for the *élite* and the masses is

¹ J. Harmand, *Domination et colonisation*, 1910, pp. 158-9.

² See *La mise en valeur des colonies françaises*, 1923; *Grandeur et servitude coloniales*, 1931.

³ See Chap. XII, pp. 786 ff.

a further illustration of this attitude.¹ Although financial conditions made impossible the simultaneous execution of M. Sarraut's full programme throughout the colonial empire, it led to the adoption of a planned system on a smaller scale, in which each colony adopts a programme of cultivation to be carried through each year, and so far as possible the products thus secured are protected by a preferential tariff on entry to the French market. This form of economic development has been described in the phrase *mise en valeur*;² but French colonial philosophy has sometimes tended to look far beyond the economic sphere for the values which it hoped to find in oversea France. The cultural potentialities of Africans have in certain respects received more encouragement from the French than from other imperial powers; and the value of African man-power is made effective by a system of military conscription,³ two years for citizens and three years for subjects. It has been realized, however, that, since large sections of the population of French West and Equatorial Africa are physically unfitted for service, they afford a less important reserve of man-power than was once expected.

The inquiry into the aspirations of the colonial populations set on foot by the *Front Populaire* Government in 1937 originated with a body of opinion which looks to the development of representative institutions as the best way of safeguarding native interests and thus represents a reaction to the assimilationist policy. This movement shows the strength of the feeling that the political future of the colonies must lie in the development of European institutions and illustrates the contention that the difference between the policies of assimilation and association is one of tempo rather than of principle.

The revulsion of feeling against the policy of exploitation followed by King Leopold II from the foundation of the Free State in 1884 led to the annexation of the territory by Belgium in 1908. The desire to safeguard the interests of the natives led to the elaboration of a colonial constitution giving the *Chambre* a measure of control over the grant of concessions, and to the creation of a special commission for the protection of natives;⁴ it is no

¹ See Chap. XVIII, pp. 1261 ff.

² See Chap. XX, p. 1400.

³ See Chap. XI, p. 627.

⁴ See Chap. VI, p. 208.

doubt because of the previous history of the Congo that Belgian public opinion has taken a marked interest in the modern administration of the colony. There was, however, little opportunity for constructive work until after the Great War, and partly for this reason policy with regard to certain problems has not so far been fully formulated. M. Louis Franck, when Colonial Minister in 1923, outlined a plan of political development based on the reconstruction of the native groups which had been destroyed during the Free State period. The earlier sentiment in favour of assimilation is exemplified by the easy facilities offered for the registration of Africans as subject to European law, and by the policy advocated by the present King, when Duke of Brabant, of universalizing individual freehold tenure;¹ but the educational system, with its essentially vocational character in which the teaching of French is kept to a minimum, is based on the principle of development on African rather than on European lines. The more recent development in native administration, and in the system of law and justice, would indeed seem to point to a policy with greater affinity to that of indirect rule than that associated with the theory of assimilation. A peculiar feature of the Belgian Congo is the relation of the government to the commercial companies established under Leopold II. As heir to the Free State, the government is a principal shareholder in these companies, a situation which necessarily influences its economic policy and can render the position of individual officials somewhat ambiguous. Economic policy has been dictated partly by the existence of large mineral deposits, partly by the *fait accompli* produced by King Leopold's concession policy. These two factors have made the development of large-scale enterprise inevitable; it has however been conducted latterly with more regard for the welfare of native labour than in most of the other territories in Africa. There is no colour-bar, and since the recent depression native skilled labour has been extensively used to replace that of Europeans. In addition to industrial development a policy of the extension of native peasant production by making obligatory the cultivation of a fixed area, or the planting of a quota of trees each year, has been actively followed since 1917. A special feature of Belgian policy is the attitude towards Christian missions.²

¹ See Chap. XII, p. 862.

² See Chap. XVIII, p. 1270.

Education is almost entirely in their hands, their work is assisted by subsidies, and it is held to be closely bound up with the development in the Congo of the sentiment of loyalty to Belgium, which was necessarily absent while the Free State was the private domain of an individual monarch; a marked discrimination is made between national and non-national missions.

If this review of political and social objectives has been of a summary nature it is because the character of an administration can be judged more clearly from its treatment of concrete issues than from abstract declarations of policy. The latter, framed for the most part to meet the political exigencies of the moment, have moreover frequently been such as to combine the minimum of definite guidance to the colonial executives concerned with the maximum difficulty of interpretation. The Kenya White Paper of 1923, in its declaration of the paramountcy of African interests, was no doubt a genuine attempt to indicate a liberal policy; but the subsequent efforts to elucidate the meaning of this declaration led to a controversy which was as barren of result, and often as bitter in character, as any of the great theological disputes of the past. The real test of British intentions in Kenya lay in the treatment of the land question,¹ or the apportionment of expenditure between objects affecting Europeans and Africans.

It is again relevant to consider the nature and force of the interest which the public of the mother country brings to bear not only on the major issues, but on the everyday treatment of colonial questions. Long tradition has given the English public a wide experience of colonial affairs; and it is characteristic that its sentiment is as keenly aroused over moral as over material issues. Possibly no other country could furnish an analogy to the long and absorbing interest evinced in the discussions which produced the Government of India Act of 1935; and it is perhaps not always appreciated in South Africa that general interest in the proposed transfer of the High Commission territories to the Union is due to a conflict between a sense of moral obligation and arguments of political convenience. Continental opinion is at the same time apt to remark that if British interest in colonial issues is genuine and well informed, it is nevertheless deficient in definition of

· ¹ See Chap. XII, pp. 742 ff.

objective and of the method of approach; policy is indeed characterized as a series of improvisations which depend for success not on a logical outlook, but on the exercise of a traditional skill in accommodating principles to circumstances. That is a criticism which has in particular been applied to the system of indirect rule; without questioning the moral sentiment on which the system is based, the critics contend that it is dangerous to proceed with such enthusiasm along a path of which the end, so far from having been defined, has not even been seriously considered. On the other hand it may be remarked that it is one of the paradoxes of colonial history that English policy, lacking though it may be in a logical study of its aims, has nevertheless been more consistent in its results than that of the French. French policy is never at any one time deficient in logical definition of its objective, but the attempt to maintain a policy in the face of varying circumstances has more than once forced a radical change in the objective itself, and in the administrative methods which serve it. In France public opinion in colonial affairs has not the same tradition as in Great Britain. Interest has been keenly aroused on such issues as the use of the colonies as a reservoir of man power for the army, or the policy of *mise en valeur* associated with the name of M. Sarraut; there is again in some quarters a more sympathetic interest in native culture than is to be found in England; but for the rest, concern in colonial matters is largely associated with party politics, and the literature dealing with the colonies is far less in extent, and makes less appeal to the general public, than that of Great Britain. In Belgium interest in the Congo arises from a double source. The public is widely concerned, both collectively and individually, as shareholder in Congo enterprises; but there exists perhaps a sentiment of even greater force in the general determination that the present-day rule of the colony should be such as to present the strongest possible contrast to the history of the Free State under Leopold II.

CHAPTER VI

SYSTEMS OF GOVERNMENT

IT is not possible within the scope of this Survey to enter into a detailed account of the system of government in each of the territories concerned. It is, however, necessary to give some outline of their legislative and executive organization, and the constitutional relations which exist between colonial or protectorate governments and the mother country. It will be appropriate also to consider here certain connected topics, such as the proposals, which have been made for the re-grouping of certain of the administrative units, the method of supervision over mandated areas, and the method of recruitment and conditions of service of administrative establishments.

I. THE UNION OF SOUTH AFRICA

In the comparative study of systems of government in the African territories, the significance of the position of the Union lies in the fact that to-day, among all the countries of the continent, it, Egypt, and Liberia are alone independent of external control. The culmination of the traditional British policy of progressive devolution to local legislatures is seen in the fact that the dominions are—to use the formal definition accepted in 1926—now recognized as ‘autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or external affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations’.¹ Since in dominion matters the ‘Crown acts on the advice of its ministers in the dominion’, the dominions now have full control of their external affairs; they may nominate their own diplomatic representatives and may conclude treaties with foreign powers. They are independent members of the League of Nations. If it is sought to obtain a closer interpretation of the relations thus created between different members of the Commonwealth of Nations, it must clearly be looked for in the views expressed by the government of each

¹ *Imperial Conference 1926, Summary of Proceedings*, Cmd. 2768, 1926.

dominion in regard to its obligations towards Great Britain or others of these 'autonomous communities'. The recognition of dominion status implies that in this respect a dominion is a sovereign state; neither Great Britain nor the collective vote of other dominions can impose any obligation on it. This consideration gives particular importance to the interpretation which South Africa has placed on its status vis à vis Great Britain.

It was inevitable that after the establishment of the Union the division between Dutch and British—the former representing, on the last occasion when the census¹ classified Europeans by descent, 57 per cent. of the population, the latter 34 per cent.—should reappear in the formation of political parties; the so-called 'one stream and two stream' schools of thought were concerned not only with internal developments but with the question whether the destiny of the Union lay in membership or independence of the Empire. The first government of the Union represented a South African National Party, predominantly Dutch in membership, but supported also by the rural Anglo-Saxon population of the Transvaal and the Cape; General Botha, the Prime Minister, favoured a policy of inter-racial co-operation and acceptance of the imperial connexion. As early as 1912, however, his Minister of Justice, General Hertzog, caused him so much embarrassment by his strongly nationalist declarations that he resigned and re-formed the ministry without him. From 1915 onwards General Hertzog's Nationalist party, pledged to independence of imperial control, to 'redress the wrongs done in 1902' and secure 'a truly free South Africa',² increased in numbers until in 1929 it had a clear majority in Parliament. General Hertzog first became Prime Minister in 1924 with the support of the Labour Party, on the understanding that the question of secession should not be raised during that Parliament. It accordingly fell to him to attend the Imperial Conference of 1926 at which the equality of status of the dominions with Great Britain was explicitly recognized, and on his return to South Africa he expressed himself as completely satisfied with this position.³ In 1930, however, the Union Parlia-

¹ See S. G. Millin, *The South Africans*, 1934, p. 206; *Union of South Africa Census Report*, May 4, 1926, part iv.

² *The Round Table*, vol. x, 1919-20, pp. 191, 203.

³ *Ibid.*, vol. xvii, 1926-7, p. 394.

ment, in accepting the report of the Conference on the Operation of Dominion Legislation, which was the basis of the Statute of Westminster of 1931, adopted a resolution providing that it should not be 'taken as derogating from the right of any member of the British Commonwealth of Nations to withdraw therefrom'.¹ On the acceptance by the Union Parliament of the Statute of Westminster, which defines the relationship of the British Dominions as one of common allegiance to the Crown, General Hertzog stated that 'we have now come to finality with regard to our constitutional freedom'.²

The Status of the Union Act of 1934 was passed by a coalition of the Nationalist and South African parties, which included in its programme 'the maintenance of the existing relationship between the Union and the British Commonwealth of Nations and co-operation with its members, subject, however, to there being no derogation from the status of the Union, and no assumption of external obligations in conflict with its interests'.³ This measure defined the relation of South Africa to the Empire. Its most significant features are the description of the Union in the preamble as 'a sovereign independent state', the provision that in South African matters the King acts on the advice of his ministers in the Union, and the amendment of the form of the oath of allegiance so as to delete the description of the King as 'of the United Kingdom'. It appears to be the view of the South African government that their interests are now sufficiently safeguarded;⁴ but the position taken up by them meets with opposition from two directions. A Dominion party, led by Colonel Stallard, stands for the development of South Africa as 'an integral and indivisible part of the British Empire', while a Nationalist opposition under Dr. Malan aims at 'a republic, but not necessarily in our time',⁵ and has urged the formal affirmation of the right of secession on occasions such as the introduction of the Abdication Bill in 1937.

The question of their position when Great Britain is at war has exercised the statesmen of most of the dominions. In the opinion of a high authority⁶ the neutrality of the dominions when Britain

¹ *The Round Table*, vol. xx, 1929-30, p. 882.

² *Ibid.*, vol. xxi, 1930-1, p. 914.

³ *Ibid.*, vol. xxiv, 1933-4, p. 900.

⁴ *Ibid.*, vol. xxv, 1934-5, p. 485.

⁵ *Ibid.*, vol. xxvi, 1935-6, pp. 857-8.

⁶ A. Berriedale Keith, *Responsible Government in the Dominions*, 1928, pp. 867, 872.

is at war is a legal impossibility. It was pointed out by General Botha¹ that in practice the question of neutrality will be for the enemy to decide, and Mr. Pirow has admitted the possibility of meeting an enemy 'so stupid that he cannot understand our constitutional position'.² The claim to the right of neutrality, however, has been frequently urged by the Nationalist party in the Union; while in opposition General Hertzog declared that neutrality was 'an unassailable right and must necessarily be so of any country which possesses the right of self-government'.³ The South African Party government in 1912 introduced a Defence Bill which provided for military defence, but they made no mention of naval defence beyond the statement that 'the main defence of the South African coast line and security of South African shipping must necessarily rest with the maintenance of sea-power by the British Navy'.⁴ Great Britain maintains a naval base at Simonstown on the Cape of Good Hope, and in 1922 the Union agreed to take responsibility for the maintenance and manning of the forts commanding it. The Nationalist opposition has proposed to protect South African neutrality by the outright cession of Simonstown 'as another Gibraltar'. General Hertzog has stated that from the standpoint of international law 'there is no difference in principle between Simonstown and Gibraltar', and that if the Union claimed neutrality Simonstown could be treated as foreign territory.⁵ Nevertheless, he expressed in 1935 a point of view which did not differ in essentials from General Smuts's declaration in 1928 that 'the great sheet-anchor of South Africa's liberty is the British fleet'.⁶ General Hertzog's words were: 'As far as its value is concerned, I feel the same about it as an Englishman does, because the freedom of my people and of my country is just as dependent upon it as England is herself.'⁷

The existing legislative and administrative organization of the Union is in essentials that created by the Act of Union. The four constituent units, the Cape, Transvaal, Orange Free State, and

¹ *Cambridge History of the British Empire*, vol. viii, 1936, p. 748.

² *The Round Table*, vol. xxv, 1934-5, p. 484.

³ Address at Stellenbosch University, 1917, quoted in *The Round Table*, vol. vii, 1916-17, p. 825. See also *The Round Table*, vol. xiv, 1923-4, p. 170.

⁴ *Ibid.*, vol. ii, 1911-12, p. 377.

⁵ *Ibid.*, vol. xxv, 1934-5, pp. 490-1.

⁶ *Ibid.*, vol. xviii, 1927-8, p. 647.

⁷ *Ibid.*, vol. xxv, 1934-5, pp. 488, 492.

Natal, retain their separate entity as provinces with a degree of local autonomy which they exercise in their own right and not by delegation from the central authority. Each province has a council whose numbers equal that of the provincial members of Parliament, but with a minimum of twenty-five members, elected on the same franchise as the members of Parliament and holding office for three years. An executive committee of four members is elected by each provincial council, not necessarily from its own members.

Provincial councils are empowered¹ to legislate on the raising of direct taxation, the borrowing of money, education other than higher education, agriculture, hospitals, local government and public health institutions, and a variety of purely local matters or matters delegated by the Union Parliament. Provincial legislation can have effect only in so far as it is not repugnant to Union legislation. The Union government may refuse assent to provincial legislation and may pass laws overriding such legislation.² A considerable measure of control over finance is exercised by an Administrator appointed by the Union government as chief executive officer in each province. He is chairman of the executive committee, on which he has a casting vote, and no financial measure can be introduced without the approval of this committee. In practice the dependence of the provinces on the Union Parliament for financial assistance has given the latter body a direct influence in their affairs.

The central government consists of an elected House of Assembly with a Senate partly elected and partly nominated. The Senate has 32 elected members, 8 from each province. They are elected by the members of the provincial councils and the members who represent the province in the Union Parliament; the method used is proportional representation with the single transferable vote. Eight senators are nominated by the Governor-General in Council. Four of these are selected for their knowledge of native affairs. The normal duration of the Senate is ten years.³

The representation in the Union House of Assembly allotted to

¹ South Africa Act, 1909, section 85.

² *Ibid.*, section 86.

³ W. P. M. Kennedy and H. J. Schlosberg, *Law and Custom of the South African Constitution*, 1935, pp. 188-9, 245-7.

the four provinces in the South Africa Act was not determined in proportion either to their population or number of electors. In order to allay the apprehensions of the Free State and Natal, the distribution of seats was weighted in their favour; provision was made, however, for future readjustments on the basis of the quinquennial censuses, and the allocation made on the basis of the 1931 census gives 61 members to the Cape, 57 to the Transvaal, and 16 each to Natal and the Free State.¹

A federal constitution of the type of that adopted at union would seem in practice to involve certain consequences. It undoubtedly makes for unity of action. But it leaves with the provinces only certain scheduled functions, while conferring on the centre all residual power and a general overriding authority in legislation. The distinctive policies which formerly characterized certain of the provincial governments—notably that of the Cape—are now subjected to the vote of the majority in the Union; the seat of power now rests in large measure in the Transvaal. It was the position assigned to the provinces which in 1922 counted largely in turning opinion in Southern Rhodesia against federation with the Union;² as a fifth province its policy would have been entirely subordinated to that of the Union. The experience of the existing four provinces has shown that all executive authority tends increasingly to be centralized, and there is in practice a decreasing measure of local autonomy.

If South Africa is distinguished by the extent of the racial division in its European population, it is in another respect unique among the dominions. The white population to which its government is responsible is greatly outnumbered by the native;³ and it is further a fact of significance in South African politics that the British and Dutch look back upon a history of divergent opinions with regard to native policy. This divergence has found its strongest expression in connexion with the franchise and the right to acquire land. The latter question is dealt with in Chapter XII, but some account must be given here of the question of the native franchise. If in modern times the question has no longer divided the two sections of the European population to the same extent as

¹ *Ibid.*, pp. 192-4.

³ See Chap. IV, pp. 108-9.

² See below, pp. 178-9.

before, it has nevertheless formed one of the outstanding issues of Union politics.

The Transvaal and Orange Free State never extended the franchise to any but their white population. The native policy which differentiated the Cape from the republics founded by the Trekkers was embodied in the Fiftieth Ordinance of 1828, which cancelled all laws differentiating against the Hottentot population.¹ The constitution granted to the Cape in 1853 extended the franchise on equal terms to all male British subjects, on the ground that 'all Her Majesty's subjects, without distinction of class or colour, should be united by one bond of loyalty and a common interest'.² In 1872 the government was made fully responsible to the local electorate. Some misgivings began to be felt towards the end of the nineteenth century with regard to the equalitarian policy. At the time of its first adoption the non-white population of the Cape was small, but as its territory was extended by the annexation of lands inhabited largely by Africans, a 'swamping' of the electorate by the native vote began to be feared. The registration of native voters began in considerable numbers in 1884. The introduction of an education qualification in 1892,³ though of general application, was intended to keep 'blanket kaffirs' off the register.⁴ The same Act raised the general qualification to property worth £75 or income of £50. The Glen Grey Act of 1894, in providing for the allotment of individual holdings to natives, laid down that occupation of land under its terms did not qualify for the franchise.

Natal had a short existence as a Boer republic from 1839 to 1845, when British authority was imposed largely as a means of enforcing the British view of native policy. Representative government was established in 1856,⁵ responsible government in 1893;⁶ natives were not explicitly debarred from the franchise, but the Native Franchise Act of 1865, while imposing the same property qualifications on all sections of the community, set up a difficult and restrictive procedure for the registration of native and Asiatic voters. The opposition between the attitude of the Cape and the

¹ E. A. Walker, *A History of South Africa*, 1928, p. 177.

² *Ibid.*, p. 252.

³ Franchise and Ballot Act, 9 of 1892.

⁴ E. A. Walker, *op. cit.*, p. 438.

⁵ *Cambridge History*, *op. cit.*, p. 390.

⁶ Act 14 of 1893.

Transvaal on the matter of the franchise formed one of the most serious obstacles to any union or federation of the South African states. When in 1902 the British government annexed the republics, the terms offered included not only the promise of self-government but an assurance that no native franchise would be given until this had been attained.¹ It was recognized at once, however, that political union implied a unified native policy, and a Native Affairs Commission appointed in 1903 spent two years in the study of this question, dealing principally with the questions of land tenure and the franchise. They found that in the Cape there were 8,117 registered native voters out of a total electorate of 135,168, and that in 7 constituencies out of 46 the native vote was strong enough to determine the issue of an election.² The Commission came to the conclusion that a franchise 'which makes the organized native vote the arbiter in any acute electoral struggle . . . is an unwise and dangerous thing', and proposed the creation in each colony of native constituencies in which Africans should vote separately from Europeans.³

The question of native franchise necessarily came before the National Convention which met during 1908-9 to decide the constitution of the Union, subject to the approval of the imperial Parliament. To the latter the line to be adopted on this question appeared to be of crucial importance for the future of native policy in South Africa. The Cape delegation, supported by the High Commissioner, Lord Selborne, proposed a uniform franchise dependent upon a civilization qualification, which would have admitted some natives while excluding some of the 'poor whites'.⁴ The delegates from outside the Cape preferred the abolition of any native franchise. Finally it was decided to retain the existing position, the Cape franchise being 'entrenched' by the provision of the South Africa Act that it could be modified only by a two-thirds majority of both houses sitting together.⁵ The right of natives and coloured persons to sit in Parliament, which had been implicitly theirs in the Cape, was now explicitly withdrawn.

¹ E. A. Walker, *op. cit.*, p. 505.

² E. H. Brookes, *History of Native Policy in South Africa*, 1927, pp. 280-1.

³ E. A. Walker, *op. cit.*, p. 545.

⁴ E. A. Walker, *op. cit.*, p. 531; *Cambridge History*, *op. cit.*, p. 639.

⁵ South Africa Act, 1909, section 35.

The question of the franchise was raised again as an element in the policy of racial segregation when the Nationalist party came into power in 1924.¹ In Natal the difficulty of registration was such that no more than three natives had ever acquired the vote,² but in the Cape, as has been seen, the native electorate had acquired political significance. A Bill providing for the abolition of the Cape franchise and the provision of a limited parliamentary representation of natives throughout the Union, voting on a separate register, was introduced in 1926, but in 1929 failed to obtain the necessary majority of both Houses together. The native electorate attained its maximum of 16,480 in 1927. Between 1930 and 1933 some 6,000 native voters were disqualified³ by the strict interpretation of a clause⁴ under which the qualifying income must have been earned during the twelve months preceding registration with a break of not more than one month. The European franchise was extended in 1930 to all white women over 21, and Act 41 of 1931 removed the property qualifications previously imposed in the Cape and Natal, and thus introduced universal adult suffrage for the European population. In 1933 the native voters formed 1·2 per cent. of the Union electorate and 2·7 per cent. of the Cape electorate;⁵ in 1934 they represented over 5 per cent. of the electorate in 13 of the 61 constituencies in the Cape Province.⁶

The attack on the native franchise was renewed in 1934 and the following year. The fact that the policy of segregation had already become effective throughout the Union in other aspects formed a powerful argument for the completion of the process by the separation of the natives from the European electorate. The Representation of Natives Act was finally passed in 1936. It provided two forms of representation. In the first place four additional seats are created in the Senate, to be filled by Europeans elected by the native vote. For this purpose the Transvaal and Free State form a single electoral area, while the Cape and Transkei are separately represented, the fourth constituency being Natal. The number of electoral areas may eventually be increased

¹ See Chap. V, p. 131.

² E. H. Brookes, *op. cit.*, p. 284.

³ *Race Relations*, vol. ii, no. 4, 1935, p. 22.

⁴ Franchise and Ballot Act, 9 of 1892.

⁵ *Race Relations*, vol. ii, no. 4, 1935, p. 23.

⁶ J. Lewin, *The Times*, May 3, 1935.

to not more than six, but no increase is to be made before 1943. The native representatives in the Senate hold office for five years irrespective of any dissolution. The second organ of representation for the native community is the Natives Representative Council of 22 members, consisting of 12 elected and 4 nominated native members, with the Secretary for Native Affairs as chairman, and the five Chief Native Commissioners, who do not vote. Members of this council hold office for five years, but may be dismissed by the minister for misconduct. The council's powers are purely advisory. It is to be summoned before the opening of every session of Parliament in order to report upon the estimates of moneys to be applied for native purposes; it is also to report upon proposed legislation in so far as it may affect the native population, or any matter referred to it by the Minister for Native Affairs, and may recommend legislation in the interests of natives.

For the election of the four European senators who represent native interests, and of the Natives Representative Council, an elaborate machinery is created. In each electoral area an electoral college is established, consisting of the 'voting units' of the area. For the Transkeian Territories these are the native members of the General Council.¹ Elsewhere the units are local councils, chiefs or headmen in areas where there are no local councils, and the native advisory boards which exist in urban areas. In areas where no native authority of any of these types exists, an electoral committee is elected by the resident taxpayers. Each electoral college elects one senator. In the Natives Representative Council one of the nominated members must be from each of the four areas. Of the elected members, three are elected by the Transkeian General Council; in the other electoral areas the native advisory boards (representing urban areas) each elect one member; the other units in the electoral college two. It is clear that the large size of these constituencies must present considerable obstacles to electoral campaigning and to the maintenance of effective relations between the members of the council and their constituents.

The measure as originally introduced would have abolished the Cape native franchise, but in its final form the Act makes a

¹ See Chap. IX, p. 353.

compromise based on proposals made by several members from the Eastern Cape,¹ who had throughout strongly opposed the abolition of the franchise. The Act as passed maintains the Cape native franchise, but provides for separate election by the Cape native voters of three members of the House of Assembly, and two members of the provincial council, who are to be additional to the existing members, and to hold office for five years irrespective of a dissolution. The Natives Representative Council met for the first time on December 6, 1937. It was opened by General Smuts, who described the council as 'the logical outcome and culmination of the movement' to call upon natives to give their advice and to assist constitutionally in their own government.² The native members included five chiefs, the principal of a high school, three editors of newspapers, two farmers, a builder and contractor, and a lawyer's clerk. The representatives asked that a process of 'Bantuisation' of the government service in the native reserves should begin.

The franchise remains open to coloured and Asiatic voters in the Cape on the same qualifications as are imposed on natives, and in 1935 there were 23,392 coloured and 1,401 Asiatic voters. In the course of the debates on the Representation of Natives Bill assurances were given that no change would be made in the franchise open to coloured persons; but the definition of a native now in force may operate to restrict the registration of such persons. A Coloured Persons Rights Bill introduced in 1926 proposed that in each of the provinces other than the Cape, coloured persons possessing prescribed property, education, and civilization qualifications should elect one member to the House of Assembly. At the end of seven years they might be admitted to the general register. This was one of the four bills by which General Hertzog proposed in 1926 to implement the segregation policy, and since he took the view that all four were interdependent, the failure to secure the requisite majority for the abolition of the Cape franchise caused them to be dropped at that time. Though the other measures were introduced later the question of the coloured franchise has not been raised again.

¹ *The Times*, Feb. 11, 1936.

² *Report of Proceedings of Natives Representative Council, Dec. 1937*, U.G. 7, 1938, pp. 12, 14.

Of the value of the new system of native representation it is too early to speak; it is not indeed certain that political opinion in the Union has yet clearly envisaged the function which the new institution is intended to fulfil. The primary interest of a large number of the European voters undoubtedly lay in the abolition of the Cape franchise, and in the permanent exclusion of natives from any share in the Parliamentary electorate. Many accepted the Natives Representative Council as an institution which, since it did not trench in any way on the European field, might at least be viewed as innocuous, though there were at the same time some who were opposed to granting natives for the first time a statutory right to combine in an expression of their opinions, or in a discussion of their relations with Europeans. It was perhaps only a minority which believed that the council would form an effective means of securing for the native an improvement in his social and material conditions. Some of those who observed the first proceedings of the Representative Council were struck with the possibilities it seemed to offer,¹ but the vitality of a consultative body created as part of the institutions of government depends on the attitude which the administration takes towards its proceedings. Unless its influence is acknowledged, and some deference paid to its views, it is apt either to fall into inanition or to enter on a course of factious opposition. The future of the council depends therefore largely on the possibility that the party predominant in Union politics will be interested not in the more negative aspects of segregation, but in a constructive policy designed to enhance the value of the contribution which the native can make to the life of the Union.

II. SOUTH-WEST AFRICA

At the time of the assumption by the Union of the mandate for South-West Africa some 11,000 German settlers remained in the territory; immigration, principally from the Union, has brought up the European population to a total of 30,407 in the Police Zone.² This population was endowed with a limited

¹ *Manchester Guardian Weekly*, Jan. 28, 1938.

² *Report by the Government of the Union of South Africa to the Council of the League of Nations on South-West Africa*, 1936, para. 640. For Police Zone, see Chap. IX, p. 375.

measure of self-government, comparable to that enjoyed by the provincial governments in the Union, in a constitution granted by Union Act 42 of 1925. There is a legislative assembly of 18 members, of whom 12 are elected by adult male Europeans of British nationality and 6 nominated by the Administrator. In this connexion it should be explained that the South-West Africa Naturalization of Aliens Act of 1924 provided for the automatic naturalization of ex-enemy residents in the territory who did not expressly state that they wished to retain their former nationality. In 1926, however, the Union Naturalization Act, which was extended to this territory, increased from two to five years the period of residence required before naturalization; Union nationals acquire voting rights in South-West Africa after a residence of six months.¹

The competence of the assembly does not include legislation regarding native affairs, mineral rights, railways, the organization of public revenue, the judicial system, postal services, control of armed forces, immigration, tariffs, and currency. On these matters the Administrator, who represents the Governor-General in the territory, legislates by proclamation. Further subjects were reserved for a period of three years from the establishment of the constitution, after which the Governor-General was empowered to declare the competency of the assembly on any one of them. These were the police force, civil aviation, education, land banks, and the disposal of crown land. These powers have not, however, been granted. On all these matters the assembly may pass resolutions recommending the issue of a proclamation enacting or amending a law; in other matters it is competent to legislate by ordinance. Ordinances require the assent of the Administrator, who may refer them back with proposed amendments or reserve them for the decision of the Governor-General. In this he acts with the advice of an advisory council consisting of the executive committee of the assembly, namely, 4 members elected by it, and 3 persons appointed by himself, subject to the approval of the Governor-General, of whom one must be selected for his knowledge of native affairs.

¹ *The Round Table*, vol. xxv, 1934-5, p. 196.

III. SOUTHERN RHODESIA

Southern Rhodesia stands politically in a position intermediate between that of a dominion subject to no external control and a crown colony in which the legislature is responsible to the imperial government. This territory, along with what is now Northern Rhodesia, was brought under British administration by the British South Africa Company, which in 1889 obtained a charter empowering it to operate in the area north of the Transvaal and British Bechuanaland, no northern limit being fixed.¹ Southern Rhodesia was constituted in 1898 by the union of Mashonaland and Matabeleland, which had been brought under the company's administration as separate units in 1894 and 1898 respectively. The aim of Cecil Rhodes was the early establishment of responsible government; but the constitution granted by the Southern Rhodesia Order in Council of 1898 provided for a legislature with only a minority of elected members, and expressly reserved control over native affairs to the imperial government.² In 1914 the number of elected members of the legislature was increased to 12 as against 6 nominated members. The term of the charter was fixed at twenty-five years from 1889. On its expiry in 1914, however, the only alternative to its renewal appeared to be the incorporation of Southern Rhodesia in the Union, a development which the predominantly British electorate did not regard with favour, and the charter was prolonged for ten years. In 1922 a referendum on the question of incorporation with the Union resulted in a majority for independence, and since that time it has been held that the future of the territory is more closely bound up with that of the areas to the north of it.³ Southern Rhodesia was formally annexed to the British Crown in 1923, and the new constitution laid down in Letters Patent of that year and creating responsible government came into force in 1924. The difference between Southern Rhodesia and those territories which can claim to have full dominion status lies in this, that while the former has an executive government responsible to its elected legislature, certain specified classes of its legislative acts are still subject, under the Royal Instructions issued to the Governor with his commission,

¹ *Cambridge History*, op. cit., p. 533.

² See Chap. IX, pp. 376-7.

³ See below, p. 179.

to reservation for the pleasure of the Crown, and to disallowance by it. Further, certain executive acts, relating in the main to the conduct of native affairs, are subject to the assent of the Crown. The Crown in this case acts on the advice of ministers in the United Kingdom.

A peculiarity of the Southern Rhodesian constitution is that the supervision of the imperial government over native affairs is exercised through the High Commissioner for South Africa. His approval is required for the constitution of the Native Affairs Department, the fixing of its officers' salaries and the dismissal of officers belonging to it, and his consent is necessary before regulations imposing differential restrictions on natives may be introduced under laws which do not specifically provide for differentiation. Native lands are vested in him. He may request the Governor in Council to refer any question relating to natives to judicial inquiry, and the imposition of fines as a punishment for revolt requires his approval, which is also necessary for the establishment of native councils. Under the Land Apportionment Act of 1930 his approval is required for regulations made under the act and particularly for the authorization of non-natives to acquire land in the native area.

On May 11, 1934, the assembly passed a resolution urging the grant of full responsible government to the colony, though it was agreed that the demand for full dominion status, involving the independent control of foreign relations, was premature. As the Prime Minister, Mr. Huggins, put it: 'They wanted freedom in connexion with their own domestic affairs. . . . But they wished to remain in the closest contact and in the closest constitutional relations with the mother country.' He was not prepared to demand the full control of native affairs before the constitution of a second chamber.¹ The Prime Minister visited London in 1934 to put his case before the Secretary of State. A draft constitution embodying the amendments agreed upon was published as a white paper in 1936,² and received the royal assent as an Act of the Southern Rhodesian Parliament in October 1937. Certain heads have been removed from the list of bills which it is compulsory to reserve.

¹ *The Times*, May 12, 1934.

² *Proposed Amendment of the Southern Rhodesian Constitution*, Cmd. 5218, 1936.

It is agreed that the officials of the Native Department have been given reasonable security of tenure by the local Public Services Act of 1931, and that the High Commissioner's right to order a judicial inquiry and the necessity of obtaining his approval for measures dealing with native councils might be allowed to lapse. The clause empowering the Governor to impose fines in case of revolt is to be dropped entirely from the constitution. On other matters¹ the home government was not prepared to relinquish its right of supervision, but it has been agreed that with modern developments in communications it is no longer necessary that this be exercised through a representative on the spot, and the remaining functions of the High Commissioner are to be transferred to the Secretary of State. The Chief Native Commissioner is to be irremovable without the latter's approval.

The constitution of 1923 established a legislative assembly, which at present consists of thirty members, and provided for the creation of a second chamber when the assembly should have passed a law to this effect. The Buxton Commission of 1921, on whose recommendations the constitution was based, held that the numbers of the European population from whom legislators could be drawn were at that time too small to warrant the immediate establishment of an upper house. The duration of the assembly is five years. The franchise is open to all British subjects, male and female, including natives, subject to a property qualification of £150, and an income qualification of £100. The European population represented numbers some 55,000. The admission of natives to the franchise was consistent with the spirit of the claim of Rhodes for 'equal rights for all civilized men'; but it is not in keeping with the policy of separate development for the African and European populations which is now the accepted principle in the territory.² The possibility of introducing some alternative system was discussed in the legislative assembly at every session from 1931 to 1933. In the latter year the Prime Minister (Mr. Moffat) stated that he had found the Dominions Office sympathetic to 'the arguments in favour of protecting the European people of this country from a majority of natives getting on the roll'.³ He

¹ See Chap. IX, p. 382.

² See Chap. V, pp. 130-1.

³ Southern Rhodesia, *Debates of the Legislative Assembly*, vol. xiii, no. 14, Apr. 26, 1933.

gave the number of native voters registered at that time as fifty-eight. No definite steps have yet been taken to deal with the question.

IV. THE BRITISH CROWN COLONIES

(a) *Relations with the Imperial Government*

The remainder of the British dependencies under discussion, whether their political status is that of colonies, protectorates, or mandated areas, are subject to the system known as crown colony government. The formal provisions for control by the imperial government over administration are the same in all these territories, though their effectiveness varies with the degree of representation accorded by law and practice to local communities. Some discussion on the sources of law and methods of legislation will be found in a subsequent chapter;¹ but it should be noted here that the provisions which regulate the scope of legislation or prescribe the conditions of its validity are not to be found, as in the case of India, in an imperial statute, but in the Order in Council or similar proceeding issued for each territory, by which the legislature, or, where there is no legislature, the ordinance-making authority is constituted. Practice prescribes that a legislative proposal of any importance (and in minor administrations any proposal for ordinance or regulation having the force of law) should be submitted to the Secretary of State for previous consideration; the Royal Instructions issued to a Governor require that certain prescribed classes of bills should, after passing the local legislature, be reserved for the orders of the Crown before he gives his assent; all legislation is subject to the veto of the Crown. Executive authority is vested in the Governor or equivalent authority as representative of the Crown; the provisions which regulate the use of that authority are partly laid down in formal orders from the Secretary of State, and partly prescribed by usage; they differ according to the extent and the importance of the territory concerned. Typical of such orders are those which provide that annual estimates cannot be acted upon until they have the approval of the Secretary of State, that no public work of any importance may be proposed to the legislature and no loan raised

¹ See Chap. VII, pp. 267-80.

without his approval, and that no additions can be made to the permanent services without his consent.

Unlike the other imperial powers Great Britain has no permanent general council to advise the government on colonial matters. The Secretary of State for the Colonies has, however, expert advisers on agriculture, colonial accounts, economics and finance, education, health and medicine, labour problems¹ and law. He is also advised by a number of committees through which the assistance of experts on various colonial problems is made available to the Colonial Office; typical of these committees are the Colonial Advisory Council of Agriculture and Animal Health,² the Colonial Development Advisory Committee, constituted in 1929 to advise on the disposal of the Colonial Development Fund, the Colonial Advisory Medical Committee,³ and the Advisory Committee on Education in the Colonies.⁴ The Colonial Office has also available to it the proceedings of the committees of the Economic Advisory Council which deal with tsetse fly, nutrition in the Colonial Empire, and locust control. There is, in addition, a large number of official interdepartmental committees and of non-official bodies on which the Colonial Office is represented. Among such bodies may be mentioned, as examples, the Imperial Institute, the Committee of the Imperial Forestry Institute, that of the Imperial College of Tropical Agriculture, and the Standing Committee on Empire Forestry.

Unlike the Colonial Ministry in France,⁵ the Secretary of State maintains no inspectorate to report on the proceedings of the administration. He remains in direct communication with the Governors, but in addition an annual report on administration is submitted by the government of each territory; this, unlike the reports received in Paris, is regularly published in London. Copies of the fuller reports of the separate departments, the proceedings of the legislative council, and the Blue Books containing statistics, as well as reports of special inquiries held, which are printed at the local capitals, are also generally published. In recent years these sources of information have been supplemented by numerous visits paid to Africa by ministers, advisers, and officers of the

¹ *The Times*, Feb. 23, 1938. ² See Chap. XIII, p. 955. ³ See Chap. XVII, p. 1159.

⁴ See Chap. XVIII, p. 1229.

⁵ See below, pp. 188-9.

Colonial Office. Many higher officials in the Colonial Office have had administrative service in the colonies, and assistants appointed to the Office must now serve there for two years. A considerable number of special commissions has been appointed to report on various aspects of colonial administration; indeed the method of the special commission, frequently containing non-official members, has been much more freely used by the British than by other countries. Direct contact with the Colonial Office has also at times been established by the visit of deputations, both European and African. The earliest deputation of Africans to be received in London was probably that of the Bechuanaland chiefs in 1895.¹ Some Gold Coast chiefs visited London in 1898 and a Gold Coast deputation again visited London in 1934; European, Indian, and African delegations from Kenya, Uganda, and Tanganyika gave evidence before the Joint Select Committee on Closer Union in 1931. Another organ of contact is the Colonial Office Conference at which the heads of colonial governments and their representatives meet in London. Two such conferences have been held in 1927 and 1930.

In the colonies and protectorates the British tradition has, as already remarked, been to secure legislation, wherever possible, through the institution of a legislative council. The presence of a considerable European population, as in Kenya and to a minor extent in Northern Rhodesia, has made some measure of representation necessary in dealing with legislation; if in other areas, where the European element is less prominent, a legislature has been established, it has been rather with the aim of securing a full and public discussion of legislative proposals than of giving at this stage effective political authority to Africans. The system has, however, been widely varied to suit the circumstances of different territories; in some cases the council is composed entirely of nominated members; in others the electorate is combined with the nominative system; in some cases representation of native interests is secured through the nomination of a European, while in others they are directly represented. It is the practice to retain a majority of official members so that any government measure which is thought to be essential can be sure of adoption. In the

¹ See Chap. IX, p. 406.

succeeding pages, which give some account of the composition of the legislature in each area, mention is also made of the composition of the executive council. The latter is a body, originally purely official in composition, which acts as adviser to the Governor; it formed in most cases the nucleus of the first legislative council.

(b) *The Composition of the Legislative and Executive Councils*

The High Commission Territories. In Basutoland, the Bechuanaland Protectorate, and Swaziland, the High Commissioner legislates by proclamation. The practice by which in Basutoland measures affecting the authority of the native chiefs have not been introduced without the consent of the national council will be discussed in connexion with native administration.¹ In the other two territories elected councils of Europeans were created in 1920 and 1921 for the purpose of advising the Resident, who is the High Commissioner's local representative; the influence of these councils on legislation is confined to requests to the High Commissioner to take action.

Nyasaland. Of the East African legislatures, those of Nyasaland, Tanganyika, and Uganda contain no elective element. The Nyasaland Order in Council of 1907 established a legislative council consisting of the Chief Secretary, Treasurer, Attorney-General, and Senior Provincial Commissioner (who form the executive council) with four nominated members who hold office for three years. It is the practice to include among the nominated members a missionary who is in a position to represent native interests.

Uganda. In Uganda executive and legislative councils were established in 1921. The executive council consists of the Chief Secretary, Attorney-General, Treasurer, Directors of Medical Services, Agriculture and Education, the Provincial Commissioner, Buganda Province, and one personally appointed official member. In the legislative council all these are *ex officio* members except the Provincial Commissioner, Buganda, and there are four unofficial members nominated for a period of three years: the practice is to appoint two Europeans and two Indians.

Tanganyika. In Tanganyika the executive council as constituted

¹ See Chap. IX, p. 394.

in 1920 consisted of the Chief Secretary, Attorney-General, Treasurer, and Director of Medical and Sanitary Services. The Director of Education and Secretary for Native Affairs were added in 1926, when a legislative council was constituted. In this body there are thirteen *ex officio* official members and ten nominated unofficial members, of whom in practice two normally represent the Indian community. Members of the legislative council are required to take the oath of allegiance to the King.¹ In view of the fact that the territory is held under mandate, this rule has aroused some discussion, though it is difficult to see what other authority could properly be substituted for the purpose of the oath. As a consequence, however, only British subjects are eligible, a fact which has caused some dissatisfaction in a territory where the British population numbers some 4,000 and the German 3,000. It is contemplated that a proportion of seats will be reserved for Africans when suitable persons become available.²

Kenya. The first legislative council of Kenya, constituted in 1907, had six official and two nominated unofficial members, the number being subsequently increased to four. A claim for elective representation was put forward by the settler community in 1913, and the consent of the imperial government to this change was announced in 1916. An ordinance passed in 1919, when the European population numbered about 9,000, divided the territory into eleven electoral areas for purposes of representation in the council, the official membership being increased in order to preserve the official majority. This ordinance in its final form made no provision for Indian representation, and Lord Milner's dispatch of 1920 issued instructions that the council should in addition to eleven elected members contain two Indian members elected on a communal franchise, that is, by the Indian population as a group.

At this point the question of the Indian franchise became a matter of acute controversy, in which pressure of opinion in India forced the government of India to take a part. The Indian community³, which at the census of 1921 numbered 22,822, contended for representation on equal terms with Europeans; the

¹ Tanganyika (Legislative Council) Order in Council, 1926.

² *Handbook of Tanganyika Territory*, 1930, p. 115. ³ See Chap. VIII, pp. 335-40.

government of India protested against the proposal to institute a communal franchise;¹ and a deputation visited London on the Indians' behalf. The matter was in some measure complicated by the fact that the Imperial Conference of 1921 had passed a resolution in favour of the removal of Indian disabilities in the dominions. The British government finally accepted the Wood-Winterton proposals, based on an agreement between the Colonial Office and the India Office, for a common electoral roll with property or education qualifications so devised as to give an Indian electorate limited to 10 per cent. of the total voters, coupled with freedom of immigration for Indians. The opposition of the settlers to this proposal, which they interpreted as involving their eventual displacement by Indian competition, was carried to the point of threatening armed resistance, and Lord Delamere headed a deputation to London to put their point of view to the Secretary of State; it is of interest to note that a deputation proceeded also to South Africa. The White Paper of 1923, to which reference has already been made,² when dealing with the question of franchise, adopted a measure of compromise between the two claims. It considered that if Indians voted on a common electoral roll it would lead to elections being fought on racial lines; it decided therefore to return to election on a communal roll, but raised the number of Indian members to 5. The new constitution of the legislative council became operative by Royal Instructions dated March 28, 1927. The official membership consists of eleven *ex officio* members and nine nominated members. Of these one normally represents Arab interests, and it is provided that in the absence of such an appointment an unofficial member is to be added for that purpose. The unofficial membership of eleven elected Europeans was increased by the addition of five elected Indians and one elected Arab member, with one nominated member, who up till now has been a missionary, to represent African interests. The Governor was empowered if necessary to fill the Indian seats by nomination; up till 1931 the Indian community expressed their dissatisfaction by boycotting the elections, and in that year they reversed their policy only to the extent that they elected representatives pledged to take

¹ *Despatch on Position of Indians in East Africa*, Cmd. 1311, 1921.

² See Chap. V, pp. 135-6.

no part in the council until the introduction of the common roll.¹ In 1934, however, they abandoned this policy of non-co-operation.

Both the European and Indian communities have adult suffrage. In the case of Arabs the franchise is limited to males able to write Arabic or Swahili in Arabic characters. Elections are held every four years. At the last census the European population numbered 16,812, Indians 39,644, and Arabs 12,166.

The executive council as originally constituted in 1905 was purely official. When the elective principle was introduced in the legislative council in 1919 provision was at the same time made for the inclusion of two unofficial members of this body, nominated by the Governor, in the executive council; their number was subsequently increased to four by the addition of an Indian member and of a European member nominated to represent native interests, while there are eight official members. It is now the practice to nominate as representatives of European opinion the leader of the elected members in the legislative council and one of the members for Nairobi. The nominated members are under no obligation to support the government and in fact frequently oppose it in the legislative council.² The presence in the executive council, the proceedings of which are confidential, of a member who may be elected to the legislature as a professed opponent of government policy, is a peculiarity which is confined to the constitution of Kenya.

It has been the practice in Kenya to consult unofficial opinion much more than a narrow interpretation of the constitution would require. From its formation in 1911 the organization known as the Convention of Associations, formed by Lord Delamere, received a consideration which earned for it the description of 'an unofficial Parliament'. The precedent of the appointment of a commission of inquiry with a majority of unofficial members was set as long ago as 1922, when an economic and finance committee was set up to recommend a general programme of economic policy. Later examples are the economic development committee of 1934, and that appointed in 1933 to review the

¹ *Joint Committee on Closer Union in East Africa, Report*, H.C. 156, 1931, pp. 39-40.

² *Report of the Commission on Closer Union of the Dependencies in Eastern and Central Africa*, Cmd. 3234, 1929, p. 89, and *Papers Relating to Closer Union*, Colonial 57, 1931, paras. 128-30.

working of the Resident Native Labourers Ordinance. A standing finance committee of the council, with an unofficial majority, was created in 1926; the Native Lands Trust Board created in 1930, whose approval is required for alienations of native land, consists of six official and four unofficial members. The Agricultural Advisory Board, the creation of which was recommended by Sir Daniel Hall's Commission in 1929, consists of three official and seven unofficial members.

The European community, however, and in particular that section which represents the settler element, has from the first been dissatisfied with the opportunity for control over the affairs of the territory which the crown colony system permits to it. The demand for complete self-government was made by Lord Delamere as long ago as 1913, in a speech to the Convention of Associations,¹ and it will be recalled that it was this claim which called forth the general declaration of policy embodied in the White Paper of 1923. His Majesty's Government then made it clear that they were not prepared to 'delegate or share the trust' which they exercised on behalf of the native races.² In 1926 the eleven elected members of the council were returned on a pledge to press for a European elected majority. The demand for relaxation of imperial control has also been put forward at a series of inter-territorial conferences of representatives of the European communities, the first of which was convened in 1925. Kenya, Tanganyika, Nyasaland, and Northern Rhodesia have been represented at these conferences. In the proposals for a federation of the three East African territories which he submitted to the Secretary of State in 1927, Sir Edward Grigg, the Governor, recommended an unofficial majority composed partly of elected representatives of the European community, and partly of members nominated to represent native interests.

As a result of discussions between the Secretary of State and the governors of several East African territories which were held in London in 1927, principles were agreed on regarding future developments in these territories which included, on the one hand, closer co-operation in their administration,³ and on the other, the

¹ E. Huxley, *White Man's Country*, 1935, vol. i, p. 279. ² See Chap. V, pp. 135-6.

³ See below, p. 182.

provision 'for increasing association of the immigrant communities in the responsibilities of government, and at the same time for the creation of more effective machinery for native representation'.¹ At the same time the statement already made in 1923, that 'responsible government is not in question', was reaffirmed. A commission appointed to make recommendations on these lines, with Sir E. Hilton Young as chairman, visited East Africa in 1927-8. This commission held that the European community could reasonably claim the right to effective representation in matters affecting taxation to be imposed upon them, protection against measures which would fundamentally change the economic conditions on the basis of which they settled in the country, a right to consultation on all governmental questions, and an opportunity for political self-expression such as could enable them to stimulate efficiency in the public services. They insisted, however, that 'what the immigrant communities may justly claim is partnership, not control'² and that until the native population was able to take part in a representative system the imperial government must retain, as their trustee, 'a right to intervene in all the business of government';³ further, they held that the differences of outlook between African and European which must persist, to whatever stage of development the African community may attain, would make it necessary for the imperial government permanently to retain the function of an arbiter between the two communities.

The majority of the commission recommended a somewhat complex constitution which need not be discussed in detail, since it was decided not to introduce it. The imperial government, though holding that 'the goal of constitutional evolution, in Kenya as elsewhere, is admittedly responsible government by a ministry representing an electorate in which every section of the population finds an effective and adequate voice', took the view that for the present the constitution of the Kenya legislature should remain substantially unchanged, with the exception that the nominated representatives of African interests be increased from one to two,⁴ and this was done in 1934. Again, the Joint Select Committee of

¹ *Future Policy in regard to Eastern Africa*, Cmd. 2904, 1927, p. 5.

² *Report*, op. cit., Cmd. 3234, 1929, p. 239.

³ *Ibid.*, pp. 83-4.

⁴ *Statement of Conclusions of H.M. Government as regards Closer Union in East Africa*, Cmd. 3574, 1930, pp. 7-8.

both Houses of Parliament appointed in 1931 to consider the whole question of closer union took the view that an unofficial majority, even with the safeguards recommended by the Hilton Young Commission, 'does morally and in fact become responsible government'.¹

The attention of the European community would seem of recent years to be directed less to the attainment of responsible government than to the extension of their influence within the limits of the existing system. In December 1936 the elected members of the standing finance committee agreed to recommend the acceptance of a light income tax² on condition that the Secretary of State instructed the Governor to examine the reconstitution of the executive council with this end in view. This proposal was accepted subject to the ultimate constitutional responsibility of the imperial government,³ and in August 1937 the nature of the proposed reconstruction was announced. The present eight official members were to be reduced to four, the unofficial members remaining the same, but holding office for a fixed period of four years.⁴

It remains to note the nature of the discussions on the Indian franchise subsequent to 1927. As already stated, the alternatives discussed were a common roll with property and education qualifications and a communal roll with adult suffrage. The Hilton Young Commission was divided on this point.⁵ The imperial government expressed itself in favour of a common roll.⁶ The Joint Select Committee took the view that, whereas the introduction of a common roll is impracticable for the present, the question should be re-examined in the event of future changes in the constitution; but that an increase in the present representation of Asiatics on the legislative council might with advantage be considered.⁷

As regards the representation of native interests the Hilton Young Commission held that for the present 'some degree of

¹ *Report*, op. cit., H.C. 156, p. 41.

² *Report on Financial Position and System of Taxation of Kenya*, Colonial 116, 1936.

³ *The Times*, Dec. 31, 1936.

⁴ *The Times*, Aug. 14, 1937.

⁵ *Report*, op. cit., Cmd. 3234, 1929, p. 249 A.

⁶ *Statement of Conclusions*, op. cit., Cmd. 3574, 1930, p. 8.

⁷ *Report*, op. cit., p. 42.

political segregation' should be maintained; they recommended that it should be made the regular practice to consult native opinion on proposed legislation through the existing native administrations, and suggested as a possible future development the creation of local councils of a more formal nature, which might ultimately be represented jointly with the other races on a central legislative council in which the imperial government would hold the balance.¹ These proposals were endorsed by the Joint Select Committee, which, however, emphasized the point that special provision may be necessary for the 'detrIALIZED' native.²

Northern Rhodesia. In Northern Rhodesia the executive council consists of five senior officials, and the legislative council of these and four other nominated officials with the addition of elected unofficial members, the number of whom was increased from five to seven in 1929. The franchise qualification is occupation of property of the value of £250, income of £200, or ownership of property of the value of £2,000. A voter must be a British subject, be able to write, and must not live a communal or tribal life; this provision appears to envisage the acquisition of the franchise by educated natives, but for this purpose some revision of the qualification would be required, since Northern Rhodesia is a protectorate and the natives have not the status of British subjects.³

Provision is made, as in Kenya, for the appointment of unofficial members of the executive council, but no such step has been taken. The unofficial community, however, has demanded 'effective responsibility for the government of the country', one of its leading representatives basing the demand on the argument that the duty of trusteeship for the native peoples has not been carried out in such a manner as to justify the claim that responsibility for their interests must remain in the hands of the existing government.⁴ The association of unofficial opinion in the control of policy has in fact been pursued along the lines which have been described in Kenya. The practice of referring legislation to select committees with an unofficial majority was inaugurated in 1929. Unofficial members serve on the various advisory boards and are represented

¹ *Report*, op. cit., Cmd. 3234, pp. 82-5.

² *Report*, op. cit., H.C. 156, pp. 34-5.

³ J. Merle Davis, *Modern Industry and the African*, 1933, p. 230.

⁴ *Legislative Council Debates, Third Session of Fifth Council*, Oct. 29, 1936, c. 345.

at the annual conference of provincial commissioners. In 1937 a standing finance committee was created, which includes two officials and two elected members.¹ Shortly afterwards the Secretary of State approved a proposal that the official and unofficial membership of the legislative council be equalized by the removal of one official member and the introduction of an unofficial member nominated to represent native interests.²

West Africa: Nigeria and the British Cameroons. Each of the four British West African territories, Nigeria, the Gold Coast, Sierra Leone, and the Gambia, is divided into a colony comprising the coastal region in which European influences have been established for a considerable time, and a protectorate covering the hinterland. On this division is usually based a dual legislative system. The Governor legislates by proclamation for the more backward areas, and by ordinances enacted with the advice of a legislative council for the coastal regions. All these councils are marked by the presence of a considerable number of African representatives.

In Nigeria the sphere of the legislative council covers both the Colony and the Southern Provinces of the protectorate, only the Northern Provinces remaining subject to legislation by proclamation. The mandated territory of the Cameroons is divided into northern and southern provinces, which are assimilated for administrative purposes to the Northern and Southern Provinces of Nigeria. The executive council in Nigeria consists of the Chief Secretary, Chief Commissioners of the Northern and Southern Provinces, Attorney-General, Commandant of the Nigeria Regiment, and Medical Director, all of whom are *ex officio* members, with the Director of Education as an appointed member. The legislative council, which was inaugurated in its present form in 1923,³ consists of not more than thirty official members, of whom three are nominated and the remaining twenty-seven *ex officio*. Four unofficial members, three from Lagos and one from Calabar, are elected and up to fifteen nominated: both election and nomination are open to Africans. The property

¹ *The Times*, Nov. 29, 1937.

² *Parliamentary Debates, House of Commons*, Dec. 8, 1937, c. 378.

³ Order in Council, Nov. 21, 1922.

qualification for the franchise is an income of at least £100. The nominated members include nominees of the four Chambers of Commerce and the banking and shipping interests, who are European; of the African nominated members one represents the Niger African traders and the others are selected as representatives of districts of the Colony and Southern Provinces which have not received the franchise.

The Gold Coast and British Togoland. The Gold Coast is divided into three sections: the Gold Coast Colony, Ashanti, and the Northern Territories; the southern section of the mandated territory of Togoland is included for administrative purposes in the Colony, and the northern section in the Northern Territories. The Governor is empowered to legislate by proclamation for Ashanti, the Northern Territories, and Togoland; in legislating for the Colony he has the advice of a legislative council.

The executive and legislative councils in their present form were constituted in 1925. The former consists of the holders of five official posts; in the latter there are, in addition to these officers, ten other official members; the unofficial members fall into three classes, provincial and municipal African members and European members. The six provincial African members are elected by councils of head chiefs; there is one council in each of the three provinces, though that of the Eastern Province is divided into three sections, each of which elects a member. The Central Province has two representatives and the Western, one. Each member of the provincial council has one vote for every ten thousand inhabitants in his division. The Governor is empowered to nominate provincial members, a provision which was necessary on the first introduction of the new system owing to the opposition of chiefs who feared that it would result in a curtailment of their powers. Three African municipal members are elected by the towns of Accra, Cape Coast, and Sekondi, the franchise qualification being occupation of a house of the rateable value of £6. Of the five European members one is elected by a committee nominated by recognized chambers of commerce; one is at present nominated by the Governor to represent mining interests, but legislation provides for his election by the chamber of mines at the request of the chamber. The other three are nominated.

Sierra Leone. In Sierra Leone the legislative council may pass measures applicable to the whole territory. It consists of the members of the executive council (five senior officials), with six other government officers and ten unofficial members. Three of the latter are elected to represent the Colony, which is divided for this purpose into an urban district with two members and a rural district with one. The franchise qualification is property worth £6 or an income of £60 in the rural district, property worth £10 or an income of £100 in the urban district. The remaining unofficial members are nominated. Three are paramount chiefs, two are Africans selected to represent African interests, one European represents general European interests, and the remaining member is a European appointed after consultation with the Chamber of Commerce. The unofficial members hold their seats for five years.

The Gambia. In the Gambia the legislative council for the Colony consists of six official members, and four nominated unofficial members.

V. RE-GROUPING OF ADMINISTRATIVE UNITS

Before proceeding to deal with the French and Belgian systems, it is convenient to give some account of the proposals which have been made from time to time for the re-grouping of certain units in the British areas. The issues at stake have been primarily political; the discussions have in more than one instance turned on differing views held of native policy, or have involved a comparison of the merits of crown colony and other forms of government. The schemes which have attracted most general attention are those relating to the incorporation within the Union of the three High Commission territories of Swaziland, Basutoland, and Bechuanaland, the integration into the Union of the mandated territory of South-West Africa, the co-ordination of the administrative services of the Rhodesias, which might possibly be extended to Nyasaland, and the scheme for the union of the three territories of Kenya, Uganda, and Tanganyika.

When the constitution of the Union was discussed by the National Convention of 1908-9, the Secretary of State said that it would be practically impossible to secure the consent of Parliament

to any constitution which did not include safeguards for native interests in the High Commission Territories.¹ It was agreed to retain for the time being the existing system of administration through the High Commissioner, while providing for the future transfer to the Union on terms set out in the schedule to the South Africa Act. These included the provision that the revenues derived from each territory were to be expended in it, that no differential duties should be imposed, and that no native lands should be alienated. On transfer the territories were to retain their separate existence, and to be administered by a permanent commission under the Prime Minister, the legislative authority being not the Union Parliament but the Governor-General in Council. Legislation affecting the schedule was to be reserved for the approval of the Crown. An agreement of 1910 provided that the territories should be treated as part of the Union for customs purposes, each receiving a fixed proportion of the revenues collected. This has not, however, prevented the exclusion from the Union of cattle under a certain weight from Swaziland and Bechuanaland, stated to be on veterinary grounds, and the treatment of Swaziland as an export area for purposes of the export of maize from the Union.² It may be noted that Union currency is used in all three territories; transport, in so far as it exists, has been provided by the Union, which manages the postal services.

The Union has invited the British government to consider the question of transfer on a number of occasions, the first being in 1925, when they were told that 'certain obligations' made it impossible at the moment.³ The question was raised at the time of the London Economic Conference of 1933, and in April 1934 General Hertzog announced his intention of inviting Great Britain to consider an early transfer. The position of the British government was stated in a memorandum drawn up in agreement between General Hertzog and Mr. J. H. Thomas, and made public in the House of Commons on June 20, 1935. The British government is pledged to Parliament that no transfer shall take place until the inhabitants of the territories, native as

¹ *Cambridge History*, op. cit., p. 639; M. Perham and L. Curtis, *The Protectorates of South Africa*, 1935.

² See Chap. XX, pp. 1408-9.

³ *The Round Table*, vol. xxiv, 1933-4, p. 785.

well as European, have been consulted, and Parliament has had an opportunity of expressing an opinion; it believed that native opinion was at the time strongly opposed to transfer. It noted also that the schedule to the South Africa Act required re-examination in the light of recent constitutional developments (i.e. the passing of the Status Act with its assertion of the independence of South Africa from imperial control). 'The policy of both Governments for the next few years should be directed to bringing about a situation in which, if transfer were to become a matter of practical politics, it could be effected with the full acquiescence of the populations concerned.' To this end the closest co-operation should be established between the governments of the two territories, and any proposals made by the Union for practical steps in this direction would be welcomed in Great Britain.¹

In 1936 an item of £35,000 was included in the native affairs estimates of the Union for development in the High Commission Territories, a step which General Hertzog defended on the ground of their impending transfer.² The offer was not accepted by the High Commissioner because of native opposition, especially in Basutoland; and in 1937 General Hertzog in expressing his disappointment at the attitude of the British Government said: 'The Union's right to the transfer of the administrations of the territories is indisputable. That the time for their transfer to the Union has already expired was conceded two years ago.'³

In March 1938, Mr. MacDonald announced that an agreement had been reached for giving effect to the programme laid down in 1935. It had been decided to constitute a standing joint advisory conference consisting of the Secretary for Native Affairs and two other officers of the Union together with the Resident Commissioners of the three High Commission Territories. The function of the conference will be to study openings for co-operation between the Union Government and the administrations in matters affecting the development of the territories and to consider any matters of joint concern to the Union and the territories.⁴ Meanwhile until the transfer of the territories can be effected the

¹ *High Commission Territories in South Africa*, Cmd. 4948, 1935.

² *The Times*, June 12, 1936.

³ *The Times*, July 7, 1937.

⁴ *Parliamentary Debates, House of Commons*, Mar. 29, 1938, c. 1813.

responsibility for their administration remains of course with the British government, but the agreement further provides for the Union government to prepare memoranda setting forth the proposed terms on which they contemplate that the transfer should take place. These are to be made available for the information of the native and European inhabitants of the territories.

The demand made by the Union has attracted much public attention in Great Britain. It has not failed to arouse opposition from those who are critical of the traditional attitude of the Union on native policy. The transferred territories would in their opinion be used to facilitate the application of the policy of segregation; it is argued that the natives of the territories generally, and in especial those of Basutoland, would regard transfer as a breach of an old-established understanding between them and the British.¹ The British cabinet appear for their part to have been influenced by three considerations. The first is that the principle of transfer could not be said to be at stake; article 151 of the South Africa Act and the appended schedule constitute an undertaking to transfer the territories, though at a date remaining to be fixed. To confine effort to the mere attempt to postpone indefinitely the date of transfer is disingenuous, the more so as the economic existence of the territories is bound up with the Union. The real difficulty lies in the third point, the reluctance of the natives. The pledge given to Parliament in 1935 does not imply that the formal assent of the natives is a necessary condition to transfer; but a far greater measure of goodwill is required on their part than exists at present; every argument therefore is in favour of establishing at an early date the machinery which may assist to produce that goodwill. It may perhaps be added that the task of those who oppose the transfer might have been easier if it could have been shown that the British government had made more active attempts in the past to improve the material condition of the territories; the facts given elsewhere² show, however,

¹ See Chap. IX, pp. 394-400; M. Perham and L. Curtis, *op. cit.*, pp. 4, 99-104; Statement by the Rt. Hon. J. H. Thomas, *Parliamentary Debates, House of Commons*, vol. ccciii, 1934-5, c. 593-7; 'Memorandum prepared by the Parliamentary Committee for studying the position of the South African Protectorates', Supplement to the *Journal of the African Society*, vol. xxxiii, no. cxxxiii, 1934, p. 5.

² See Chap. IX, pp. 393-413.

that it is only since the question of transfer has come to the fore that they have made any serious effort to do so.

The political future of South-West Africa has been a matter of discussion almost from the date of the acceptance of the mandate by the Union. A commission appointed in 1921 to make recommendations as to the form of government to be introduced took the view that the provision of the League Covenant for its administration 'as an integral part' of the territory of the mandatory excluded any question of ultimate independence.¹ The administrative system of the territory has been closely assimilated to that of the Union. Roman-Dutch law as amended by Cape legislation up to 1920 has been proclaimed the common law of the country, though German law remains in force where it is not inconsistent with this system. The judicial system is organized in the same way as in the Union, and the Union law of insolvency, registration of deeds, land settlement and administration of estates has been proclaimed.² The railways and harbours of South-West Africa and the Union are administered as a single system. The territory is included within the Union for customs purposes, and can only raise loans in the Union.

Discontent with the existing system, which was held to subordinate the economic interests of the territory to those of the Union, led to the adoption by the assembly in 1932 of a resolution demanding the delegation to it of the powers reserved in the South-West Africa Act,³ and certain other additions to its competence.⁴ The Union government agreed to pass the necessary legislation, but before this could be done the situation was altered by the advent to power of the National-Socialist party in Germany and the intensification of German nationalist activities in the territory. The reaction of the British section of the population to this development was a movement for the incorporation of South-West Africa in the Union as a fifth province.⁵ Under an amendment to the criminal law introduced in 1933,⁶ the local German National-

¹ *Final Report of the Commission on the Future Form of Government in the South-West Protectorate*, U.G. 24, 1921, p. 3.

² *The Round Table*, vol. xv, 1924-5, pp. 612-3.

³ See above, p. 156.

⁴ *Report of the Government of the Union of South Africa to the Council of the League of Nations on South-West Africa*, 1932, pp. 3-4.

⁵ *The Round Table*, vol. xxv, 1934-5, p. 197.

⁶ Ordinance 13 of 1933.

Socialist organization was suppressed in October 1934, and the German members then resigned from the assembly and advisory council. The assembly elected in 1934 adopted a resolution in favour of the administration of the territory as an integral part of the Union, either in the form of a fifth province or otherwise.¹ The Union government then appointed a commission to inquire into the reasons for dissatisfaction with the existing form of government and recommend measures of improvement. Its members could not agree upon a new constitution, one favouring incorporation as a province of the Union, one administration on the lines foreshadowed for the High Commission Territories in the schedule to the Act of Union,² and the third a compromise in which the European community would have certain powers of local government, while the administration of native affairs, land settlement, mining, justice, and police would be in the hands of the relevant Union departments. In reporting on the question to the League of Nations, the Union government, upon whose resources a province deeply in debt would be a heavy burden, expressed the opinion that sufficient grounds did not exist for an alteration of the present constitution.³ It added that it had as little thought of abandoning the mandate as it had of abandoning its own territory. Whether the terms of the mandate would permit of South-West Africa's being administered as a fifth province of the Union presents a legal issue which has not yet been fully explored either by the Union or by the Permanent Mandates Commission.

Southern Rhodesia sent delegates to the National Convention which drew up the Act of Union, and entered into a customs union with South Africa; the Act itself made provision for possible amalgamation with the Union. As already remarked, when the question of granting responsible government to the territory was considered, amalgamation with the Union was regarded as the only alternative.⁴ The arguments in favour of incorporation are by no means negligible. Southern Rhodesia was colonized largely from the south. It has adopted the Roman-Dutch law, and appeals from the local courts lie to those of the Union. The rail-

¹ *Report of South-West Africa Commission*, U.G. 26, 1936, p. 14.

² See above, p. 174.

³ *Report*, 1936, p. 4.

⁴ See above, p. 157.

way system is continuous with that of the Union, and the line as far as Bulawayo is managed from South Africa; the Union is an important market for Rhodesian produce. Nevertheless, entry into the Union was strongly opposed in 1922, when, in spite of the favourable financial terms offered by the Union, the referendum showed a majority of 2,780 in favour of responsible government. It is still opposed by a considerable section of opinion which is anxious to preserve the predominantly Anglo-Saxon character of Southern Rhodesia where, at the census of 1936, 96½ per cent. of the white inhabitants were of United Kingdom origin. This population has no sympathy with the separatist movement in the Union, and does not wish to accept the bilingualism which membership of the Union would involve; it fears, again, that the crown land of Southern Rhodesia might be used for the settlement of 'poor whites' from the Union.¹ The advantages of inclusion in the customs union soon began to prove illusory. In 1924 the Union prohibited the import of Rhodesian meat and scrap tobacco; in 1930 a quota was enforced on all Rhodesian tobaccos, and a conference at Pretoria agreed that each government should frame its own tariff;² in 1934 Southern Rhodesia denounced the customs convention. On the Union side realization that the incorporation of Southern Rhodesia would reopen Union markets to the competition which they have thus excluded provides a strong argument against such a step; it is probable indeed that a renewal of the proposal might encounter in the Union views materially different from those of 1922.

Of recent years the development of copper-mining in Northern Rhodesia has brought to that territory a considerable European population who are now seeking a larger share of self-government and believe that this could best be attained through the union of the two Rhodesias. The first suggestion of this was made in 1915, when Sir Starr Jameson visited the two Rhodesias in the hope of securing popular support for their unification. At that time, however, the small white population of Northern Rhodesia were reluctant to accept the domination of the much larger European community to the south, while the latter were equally apprehensive of the burden on their resources of amalgamation with a

¹ *The Round Table*, vol. xii, 1921-2, pp. 208-9. ² *Ibid.*, vol. xxv, 1934-5, p. 625.

territory as yet undeveloped.¹ The Commission of 1927 on Closer Union of the Dependencies in Eastern and Central Africa² took the view that Northern Rhodesia and Nyasaland, even taken together, formed an economic unit too small to justify the establishment of a separate government such as they recommended for Tanganyika, Kenya, and Uganda. They discussed a number of alternative possibilities including both association with the northern group and federation or amalgamation with Southern Rhodesia. In their view, however, it was as yet early to impose fresh responsibilities on the government of Southern Rhodesia, while it was still an open question whether the territory to the north of the Zambesi could be regarded as a 'white man's country' in the same sense as that to the south.³ On the publication of the Commission's report in 1929 the Prime Minister of Southern Rhodesia issued a memorandum which laid stress on the close connexion between the two Rhodesias and protested against recommendations 'likely to lead to the eventual absorption of Northern Rhodesia into the Eastern African system'. The assertion in the Passfield White Paper of 1930 of the paramountcy of native interests, although it repeated word for word the terms of the White Paper of 1923,⁴ aroused anxiety among the local European population, and gave impetus to a movement from the north in favour of amalgamation with Southern Rhodesia as the only means by which the small European communities of Northern Rhodesia and Nyasaland could hope to achieve responsible government. In 1931 joint representations were made to the Secretary of State by the Southern Rhodesian government and the elected members of the Northern Rhodesian legislature, asking that a conference be held to discuss the possibility of amalgamation. Mr. J. H. Thomas replied that 'His Majesty's Government, while considering that amalgamation is not practicable now or in the near future, do not wish to reject the idea in principle. . . . The conditions of any scheme of amalgamation . . . must make a definite provision for the welfare and development of the native population.'⁵

In 1936 the demand for amalgamation had the support of

¹ *The Times*, May 29, 1936.

³ *Report*, op. cit., p. 285.

⁵ *Parliamentary Debates, House of Commons*, vol. ccliv, 1930-1, c. 1472.

² See below, p. 182.

⁴ See Chap. V, pp. 135-6.

all the Southern Rhodesian parties, and six out of seven of the elected members in Northern Rhodesia; a conference held at Victoria Falls agreed upon the terms of amalgamation to be submitted to the imperial government.¹ The reply made was that there had not been such a material change in conditions as would justify a reconsideration of the decision of 1931. In 1937, however, further representations were made in London on behalf of both territories, and as a result the appointment of a Royal Commission to inquire into the possibility of some form of 'closer co-operation or association' between the Rhodesias and Nyasaland was announced.² It is relevant to recall that the European population of Northern Rhodesia was, in 1935-6, 9,913 against 55,419 in Southern Rhodesia. Though the resources of the former territory have lately improved, the recent report³ by Sir Alan Pim points to the great leeway which has to be made up in its social services. But the main obstacle to federation appears to lie in the existence of large native areas, such as Barotse⁴ province, which call for special treatment.

After the British occupation of Tanganyika, proposals for a federation which would include Kenya, Uganda, Tanganyika, Nyasaland, Northern Rhodesia, and Zanzibar were published by Sir Harry Johnston and other writers. A reference by Mr. Amery, when Secretary of State in 1926, to 'the ideal of a united East Africa' may be regarded as the only pronouncement by a minister of the Crown in favour of such a development in the near future.⁵ It is open to doubt whether the creation of a self-governing dominion would be compatible with the maintenance of the obligations undertaken by Great Britain as mandatory for Tanganyika, but the mandate authorizes union with neighbouring territories on certain conditions.⁶ In 1924, following a motion in Parliament for the appointment of a commission to report on the co-ordination of policy and administration in the territories, a commission, with Mr. Ormsby-Gore as chairman, spent three months travelling through Nyasaland, Kenya, Uganda, and

¹ *The Times*, Jan. 25, 1936.

² *Parliamentary Debates, House of Commons*, vol. cccxxix, 1937, Nov. 23, c. 1023-5.

³ *Report on the Economic and Financial Position of Northern Rhodesia*, Colonial No. 145, 1938.

⁴ See Chap. IX, pp. 456 ff.

⁵ *The Times*, June 12, 1926.

⁶ See below, p. 217.

Tanganyika. The commissioners were not instructed to make any proposals for federation,¹ but they did sound local opinion on the question, and reported that they found little support for the idea, and definite hostility from various quarters, including the European community in Kenya, the native government in Buganda, various Indian associations, and all shades of opinion in Zanzibar. They rejected the idea of federation on its merits, on the grounds that lack of communications would be a serious obstacle and that federal government would be cumbrous. They recommended, however, a series of inter-territorial conferences at regular intervals at which all six dependencies should be represented. Matters of general policy which presented common problems, such as native administration, communications, taxation, land and labour policy, should be discussed at a conference of governors. Conferences of educational and agricultural officers were mentioned as examples of joint discussions which should be held between the heads of technical services. The first Governors' Conference was held at Nairobi in 1926 and the second in 1930.

The question of closer union was again discussed by the Secretary of State with various of the East African Governors in London in 1927. Sir Edward Grigg, Governor of Kenya, recommended the immediate establishment of centralized control of transport, communications, customs, defence, and research.² A White Paper issued after these discussions announced the appointment of a commission to inquire into the possibilities of 'closer union and co-operation', which should have in mind the ultimate federation of all six territories, though it might be found that for the present only a union of Kenya, Uganda, and Tanganyika was practicable.³ This commission, as has already been shown,⁴ visited East Africa in 1927-8 and recommended a series of steps towards an ultimate union under a Governor-General, who would have powers designed to enable him to exercise at close quarters the functions of supervision and control which are at present the responsibility of the Secretary of State.⁵ As a preliminary step a High Commissioner should be appointed for Kenya, Uganda, and

¹ *Report of the East Africa Commission*, Cmd. 2387, 1925.

² E. Huxley, *op. cit.*, vol. ii, 1935, p. 218.

³ Cmd. 2904, 1927.

⁴ See above, p. 168.

⁵ Cmd. 3234, 1929.

Tanganyika, whose functions would be to work out plans for the development of a unified native policy based on the principles quoted earlier,¹ the promotion of unified control of services of common interest, and the proposed modifications in the constitution of Kenya.² Sir Samuel Wilson, Permanent Under Secretary of State for the Colonies, was subsequently instructed to visit East Africa and ascertain on what lines a scheme for closer union would be administratively workable. He recommended the appointment of a High Commissioner exercising legislative and administrative control over certain major services, all other matters including native policy being left to the local legislatures.³ The Statement of Conclusions issued by Lord Passfield when Secretary of State in 1930⁴ embodied a proposal for the appointment of a High Commissioner who should both advise the Secretary of State on native policy and legislate for all three territories on certain matters of common concern to them; in legislating for these matters he would have the assistance of a council of three official and twenty-one nominated members, seven of these coming from each of the three territories.

These proposals were submitted to the consideration of a Joint Select Committee of both Houses of Parliament, which sat in 1930-1, and came to the conclusion that any far-reaching step in the direction of closer union at that time would be inopportune, on account of the increased financial cost in a time of economic depression, the reluctance of the native witnesses from Uganda and Tanganyika to be more closely associated with Kenya, the obstacles presented by inadequate communications, and the absence of any common consciousness in the populations of the territories.⁵ They recommended, however, that there should be regular conferences of the Governors of Kenya, Uganda, and Tanganyika, with periodical extraordinary conferences including the Governors of Northern Rhodesia, Nyasaland, and Zanzibar, and that a joint secretariat should be created which would serve also for inter-territorial conferences on technical subjects.⁶

The Permanent Mandates Commission of the League of Nations

¹ See Chap. V, pp. 135-6.

² See above, pp. 169.

³ *Report of Sir S. Wilson on his Visit to East Africa*, Cmd. 3378, 1929.

⁴ Cmd. 3574, 1930.

⁵ *Report*, op. cit., H.C., 156, 1931, pp. 14-15.

⁶ *Ibid.*, pp. 16-23.

expressed in 1933 the opinion that a political or constitutional union between Tanganyika and the neighbouring territories cannot be carried out as long as the mandate is in force,¹ and has subjected to close scrutiny such measures of administrative unification as have been taken. These have so far not been numerous. The customs union between Kenya and Uganda, created in 1917, has been extended to Tanganyika,² and in 1933 the Tanganyika postal service was amalgamated with that of Kenya and Uganda, which had been established as a joint service in 1911.

Apart from these steps, co-ordination of policy has been sought by means of informal agreements, reached in the Governors' Conference, which now meets once a year. In 1934 and 1935 resolutions urging that circumstances had so changed as to render an early union of Kenya and Tanganyika desirable were passed at meetings representing European unofficial opinion in the two territories and submitted to the Secretary of State; he replied, however, that the reasons which had led the Joint Select Committee to regard such a step as premature still held good.

From the purely administrative point of view some further measure of co-ordination clearly remains desirable. Some of the difficulties based on lack of communication are rapidly being reduced. There are many evidences of overlapping or duplication of work in the technical services of these territories; in some cases not only would a single directorate secure a saving of overhead expenses, but it should ensure a more efficient use of existing resources. In a branch of work such as survey, the existence of separate establishments is almost an anomaly. The meetings of technical officers in connexion with the Governors' Conference are useful; but their resolutions have no binding force. The conflict of interests in regard to rates on the Uganda railway or the traffic of Lake Victoria illustrates the inefficacy of the existing means of co-ordination.³ It may again be doubted whether in present circumstances the charges due to the maintenance of three separate

¹ *Report, Session xxiii*, 1933, p. 189.

² On Jan. 1, 1923, Kenya and Uganda on the one hand, and Tanganyika on the other, adopted identical tariffs; local produce of the three territories was placed upon the free list. On Aug. 1, 1927, a Customs Agreement for the free interchange of both local produce and imported goods entered into effect.

³ See Chap. XXIII, p. 1580.

governorships and their secretariats can be justified. The political issues of amalgamation, however, continue to present a problem which, if not insoluble, is of great difficulty. The Permanent Mandates Commission would appear to have shown itself somewhat unduly susceptible in its criticism of the few measures of co-ordination so far effected between Tanganyika and the other areas, and the validity of its conclusions as to the incompatibility of amalgamation with the terms of the mandate seems at least debatable. It can at the same time be readily understood that the British government does not desire, while the future of the ex-German colonies is under discussion, to take any step which may cast doubt on its aims as a mandatory power. The difficulty of any scheme of administrative union is accentuated by the position of Kenya. The co-ordination of administrative services is not feasible unless there is also a unitary control of finance; and it would only be possible to secure this by creating a constitutional authority capable of counteracting, when necessary, the influence of the European section in the Kenya legislature.

VI. THE FRENCH SYSTEM

(a) *Relations between France and the African Colonies*

The principle of devolution to local legislatures, the operation of which in the British dependencies in Africa has been described, has no parallel in the relations of the French government with its colonies. All legislation emanates in theory from the metropolis, although the details of its application must necessarily in practice be determined by local ordinances; and the formal consultation of unofficial opinion previous to legislation is largely effected in the metropolis, through parliamentary representation of the colonies and by the appointment of their delegates as members of advisory councils.

The French colonial empire resembles the British, in contrast with the Belgian and Portuguese, in having no fundamental statute defining the constitution. Under the Second Empire, the Senate was given the duty of defining by *sénatus-consulte* the status of the Colonies. The result was the *sénatus-consulte* of May 3, 1854, which gave a detailed constitution to the 'Old Colonies' (the

Antilles and Réunion), but as regards the others, provided that they should be governed by imperial decree. At some future date they were to be endowed with a constitution. The Republic did not make provision for colonial legislation in its own constitution, and has had to fall back on a juristic convention which gives a survival value to the *sénatus-consulte* of 1854, as a solitary item in the discarded imperial constitution. The President of the Republic has power to legislate for the colonies by decree, without consulting either Parliament or the *Conseil d'État*. In practice colonial decrees are issued on the advice of the Minister for the Colonies, and frequently on the recommendation of the local authorities.

Since, however, with the fall of the imperial régime the *sénatus-consulte* of 1854 lost the character of a constitutional enactment and has now only the status of a law which can be modified by parliamentary procedure, the *Chambre* has asserted its right to legislate for the colonies. It is agreed that ordinary legislation does not extend to them unless this is specially expressed in the law itself; but the *Chambre* has declared applicable to them a considerable body of metropolitan legislation dealing with matters of general principle, such as the freedom of the press and of public association.¹ It is principally in financial matters, however, that Parliament intervenes in colonial affairs. Its authorization is necessary for loans to the colonies, if a state guarantee is involved; if not, a decree of the President in Council is sufficient. Colonies in receipt of loans guaranteed by the government must submit their budgets for the approval of Parliament.² Parliamentary sanction is required for the construction of railways with any form of financial assistance from the metropolitan government.³ The right of Parliament to impose taxation on the colonies was asserted in a law of April 28, 1893,⁴ which was described as being based on the principle that all Frenchmen, whether they live in France or the colonies, are equal in matters of taxation. In accordance with this principle, a law of 1900⁵ made the colonies liable for the military expenditure incurred on their behalf by the home government, which makes itself responsible for their defence. While, however,

¹ A. Girault, *Principes de colonisation et de législation coloniale*, 1927, vol. ii, pp. 11, 571.

² P. Dareste, *Traité de droit colonial*, 1931, vol. ii, p. 53.

³ *Ibid.*, vol. ii, p. 54.

⁴ *Ibid.*, vol. ii, p. 8.

⁵ *Ibid.*, vol. ii, pp. 8-9.

the Parliament is to some extent a source of legislation, it remains the fact that the great bulk of legislation is secured by ministerial decree.

Originally subject to the control of the Minister of Marine, the colonies were transferred to the Minister of Commerce and back again on several occasions between 1881 and 1893, till finally in 1894 the growing importance of the African colonies in particular was held to necessitate the creation of a separate ministry.¹ The Colonial Minister has the assistance of an expert advisory body, the *Conseil Supérieur des Colonies*, first constituted in 1890,² completely reorganized in 1920,³ and again in 1937,⁴ with the title of *Conseil Supérieur de la France d'Outremer*. As constituted in 1920, this body was divided into three sections, the *haut conseil colonial*, an economic council, and a council on legislation. The *haut conseil colonial* consisted of former colonial ministers, former Governors-General, and representatives of the Ministers for Foreign Affairs, War, and Marine. It was abolished in 1937.

The economic council and the council on legislation are interesting in that they contain an elective element. The President and Vice-President of each are nominated by the Colonial Minister for a period of four years. The senators and deputies of colonies with parliamentary representation, and delegates specially elected from the other colonies, are members of both councils. Of these delegates four represent colonies of the West African Federation—Guinea, the Ivory Coast, Dahomey, and the French Sudan—and one delegate represents Equatorial Africa. They are elected for a period of four years by the French citizens of the territories concerned;⁵ this electorate may include natives who fulfil the requisite conditions, but it is more usual to elect a delegate resident in France than a member of the local community. The nominated members of the economic council consist of twenty-four representatives of colonial interests, ten of metropolitan interests, and the presidents of the six organizations of chambers of commerce most interested in colonial trade. The legal section advises on administrative and financial as well as legal questions,

¹ Ibid., vol. i, pp. 214–15.

² Ibid., vol. i, p. 218.

³ Ibid., vol. i, pp. 218–21.

⁴ See *L'Afrique française*, July 1937, pp. 349–52.

⁵ Decree of Jan. 23, 1929.

thus taking over some of the functions of the *haut conseil colonial*. Its nominated members are two members of the Council of State, two members of the *Cour des Comptes*, a member of the Court of Cassation, a member of the Paris Court of Appeal, and a professor of public law. These councils must meet twice a year; but the questions to be submitted to them are left to the discretion of the minister.

Specialized advisory bodies include an education committee, created in 1895, a committee on public works, dating from 1894, and a committee on requests for concessions, established in 1898; all these have been frequently reorganized. A special commission of inquiry on native affairs was appointed in 1909, and in 1913 a permanent body was established for the purpose. It consists of about sixty members, and is required to examine all reports received on native policy, and in general to advise on questions submitted to it by the minister.¹ In 1937 the creation of a body with a definite programme of study of native affairs was announced when the government decided to set up a special committee to study the aspirations and needs of the native populations.² It consists of three senators, six deputies, and twenty other persons, selected for their expert knowledge; the President is M. Guernut, a former Minister of Education.

A general conference on colonial economic questions, which was repeatedly compared to the British Imperial Conference, was held in Paris from December 1934 to January 1935.³ Its organization differed in fact both from the imperial and colonial conferences in that its membership was not confined to representatives of governments. In addition to them it included the elected representatives of the colonies in the Senate, *Chambre*, and *Conseil Supérieur des Colonies* (as it was then called), and representatives of economic interests both in France and the colonies.

It is perhaps typical of the centralizing tendency of French colonial policy that France has devised an institution for the supervision of colonial administration and the collection of information from official sources, which remains unique; this is the colonial

¹ P. Dareste, *op. cit.*, vol. i, pp. 217-18.

² *Africa*, vol. x, no. 2, 1937, p. 235.

³ See *L'Afrique française*, Dec. 1934, pp. 696 ff., May 1935, pp. 270 ff., and Aug. 1935, pp. 516 ff.

inspectorate, a separate branch of the service, the members of which are occupied exclusively in visiting the various colonies and returning to France to report.¹ The director of this service, who has his permanent office at the Colonial Ministry, is responsible for advising the minister on all measures of colonial administration for which his sanction is required.² Each colony is visited every two or three years by a 'mission' consisting of a group of members of the inspectorate; it is then for the director to convey the recommendations to the governments concerned and request action upon them. The inspectorate has considerable powers. Its members are responsible directly to the Minister for the Colonies and are thus not subject to the orders of any local authority. They are required to inspect both administrative and technical services, including the military organization, and have the right to request the assistance of any official in their work, and to be present at sessions of the local administrative councils specially convoked on their account. In order, however, to guarantee their detachment, they are strictly forbidden to issue any order, and members of this service may not be appointed, even temporarily, to any administrative position.³ Their reports are not made public.

The principal official source of published information on the colonies is the *Journaux Officiels* which publish official documents of various kinds; save of course for the mandatory areas, there is no annual report published, nor are departmental reports given to the public. Information, whether statistical or other, is therefore relatively difficult to obtain. West Africa has made a welcome departure in publishing in 1934 and 1936 two *Annuaires Statistiques*, roughly corresponding to the British Blue Books; the monthly bulletin published by the *Agence Économique de l'A.O.F.* refers mainly to trade movements.

(b) *The Territorial Organization of the African Colonies, and the powers of their Governments*

French West Africa is a federation of seven colonies each with its own Lieutenant-Governor⁴, subject to the central control of a

¹ See P. Daresté, *op. cit.*, vol. i, pp. 223-5; Decree of Nov. 25, 1887.

² A. Girault, *op. cit.*, vol. ii, pp. 233-9.

³ Decree of Apr. 1, 1921.

⁴ Now called Governor. Decree of June 14, 1937.

Governor-General. It originally consisted of eight colonies—Senegal, Sudan, Guinea, the Ivory Coast, Dahomey, Mauretania, the Niger and the Upper Volta. The last was abolished in 1932 and its territory absorbed by its neighbours. Each colony is divided into *cercles* under an *administrateur*, usually referred to as *commandant de cercle*; within a *cercle* a subdivision may be created under a *chef de sub-division*. The city of Dakar is under a special administration.

The mandated territory of Togo is not subordinate to the administration of French West Africa. It has financial autonomy, and its head has the title of Commissioner of the Republic.¹ A certain degree of unification of the higher ranks of the administrative service of Togo with that of the neighbouring territory of Dahomey was however introduced as a measure of economy.² A decree of 1934 provided that the office of Commissioner of the Republic should be held by the Lieutenant-Governor of Dahomey, while there should be a joint head for Dahomey and Togo of most of the departmental services; in 1936 a further reorganization provided that Togo should once more have its own head of the police and customs services. In 1937 the majority of the other services were similarly restored to Togo, and it was provided that the Governor-General should hold the office of High Commissioner for Togo, being represented at Lomé by an *administrateur supérieur* with the rank of *Commissaire de la République*. The territory retains its budgetary autonomy.³

The federation of Equatorial Africa was formed in 1910 from the three colonies of the Gabon, the Middle Congo, and the Ubangi-Shari; the Chad territory, attached to the Ubangi-Shari, remained under a military government till 1920, when it received the status of a separate colony. Between 1925 and 1929 the Middle Congo was under the direct administration of the Governor-General.⁴ During the years of economic depression, reductions in the cost of administration became urgent, and it was held that improvements in communications made the elaborate federal organization unnecessary. Accordingly, the territory was

¹ P. Daresté, *op. cit.*, vol. i, pp. 55, 80, 81.

² See *L'Afrique française*, Aug. 1935, pp. 494 ff.

³ *Rapport annuel du Togo*, 1937.

⁴ P. Daresté, *op. cit.*, vol. i, pp. 72-3.

reorganized in 1934 as a unit with a single budget and one secretariat at Brazzaville, the head of the administration retaining, however, the title of Governor-General, and the former colonies continuing to be recognized as separate units with the name of *régions*. A delegate of the Governor-General, having the rank of governor, is responsible for the administration of the Ubangi-Shari and Chad; a *commandant de région*, responsible to the governor at Bangi, is in charge of the latter territory, which still has something of the character of a military administration. The Gabon is made subject to the authority of an *administrateur supérieur* directly responsible to the Governor-General.¹

At the same time the administrative subdivisions were completely remodelled by the creation of twenty provinces or departments, defined on geographical, ethnic, and economic principles, with an average area of 125,000 square kilometres, the subdivisions remaining as before.² In 1936, however, it was found that the improvements in communications had not been sufficient to justify the creation of these large units; a further reorganization was accordingly made by the creation of fourteen additional units, eleven being classed as departments and two as autonomous subdivisions, while the commune of Brazzaville was separated from the province. It is also proposed that, without returning to the federal system with four separate colonial budgets, decentralization should be encouraged by separating the budgetary estimates for the four regions.³

The Cameroons were annexed to the federation in 1917, but with the introduction of the mandatory system this territory was detached from Equatorial Africa, and retains its separate status under a Commissioner of the Republic who is a member of the *conseil de gouvernement* of Equatorial Africa.⁴ It was originally subdivided into eleven *circonscriptions*, but additional units were created as the interior was brought under effective administration.⁵ There are now seventeen such divisions,

¹ Decree of June 30, 1934.

² 'Discours du Gouverneur Général', *Annuaire de documentation coloniale comparée*, Institut Colonial International, 1934, vol. ii, p. 267; 1935, vol. ii, p. 283.

³ *Arrêtés* of Apr. 29, July 24, 1936; see also *L'Afrique française*, March-April 1937, pp. 131-40.

⁴ Decree of Mar. 23, 1921.

⁵ *Rapport annuel par le gouvernement français au Conseil de la Société des Nations*, 1933, p. 6.

which were given the name of *régions* in 1935, and forty-six subdivisions.¹

The powers delegated to a Governor-General have never been very precisely defined. The decrees creating the office describe him as 'the repository of the powers of the Republic' and the head of all the administrative services; as such he posts to the various colonies the officials who are appointed by the Minister. He is assumed to hold, subject to ministerial instructions, all the executive authority of the Government of the Republic. His position in regard to legislation is peculiar. The ministerial decree does not enter into force till it is promulgated by him in the local *Journal Officiel*. No general legislative powers are expressly conferred on him; but a large number of laws and decrees is passed in general terms leaving it to the Governor-General to determine the details of their application by means of rule-making *arrêtés*,² issued under his *pouvoir réglementaire*, which gives him authority to attach criminal penalties to the breach of rule. A particularly important matter which is regulated in this way is the organization of native courts. The Governors-General are also entitled by virtue of their position as heads of the police to legislate by *arrêtés* on matters as diverse as the control of navigation, sanitary regulations, military requisitions, and the control of private schools.³ They may impose taxation other than customs tariffs, subject to the approval of the Minister, and may create state monopolies. They submit the colonial budget to the Minister who, though he is able to impose conditions for his approval, must approve or reject *en bloc*. The budget must be approved by decree before coming into force.⁴

Certain legislative measures expressly stipulate that the *arrêtés* which they authorize the Governor-General to make must have the approval of the Minister, or even be approved by decree, before coming into force. The type of measures which contain this provision seems to be determined less by any general principle than by the attitude of different ministers towards the delegation of powers. Approval by the Minister does not involve any formal

¹ *Arrêté* of Apr. 8, 1935.

² P. Daresté, *op. cit.*, vol. i, p. 32.

³ *Ibid.*, vol. i, pp. 327, 678.

⁴ *Ibid.*, vol. i, p. 328.

procedure; it is sometimes regarded as implicit, and it can be given on the basis of a summary of the essential features of the legislation in question.¹ The powers of the Commissioners of the Republic in the mandated areas of Togo and the Cameroons are similar to those of Governors-General.²

It does not appear that there is any very precise definition of the powers of the Governors-General vis à vis the Lieutenant-Governors. Though it has been customary to speak of the governments of West and Equatorial Africa as 'federations', the term is not used in the sense usually assigned to it in constitutional practice. The component 'colonies' originally dealt direct with the Colonial Ministry; those in West Africa were first grouped under the Governor of Senegal in 1895 and subsequently under a Governor-General in 1904. The steps by which the federation of Equatorial Africa was created have already been described.³ But the 'federations' thus established are administrative, not political; the colonies, as such, have not been left, or endowed by statute, with any independent field of legislative or executive action. They differ therefore in an important respect from the Indian 'provinces' which at an earlier stage of their development presented some analogy to them. The circumstances which have dictated constitutional developments in India are of course entirely different from those of Africa; but it may be noted that the Indian 'province', starting as a subordinate administrative unit, has been given, as a preliminary to federation between the British Provinces and Indian States, a position which has most of the aspects of legislative and executive autonomy. In French West and Equatorial Africa, while the creation of a federation has, as was intended, effected a considerable measure of decentralization vis à vis the Colonial Ministry, the general tendency has been for the Governor-General in both areas to extend a centralizing control over the 'colonies', or at least to effect a division of functions which leaves the executive of the 'colony' a relatively small field of administrative authority. Thus in West Africa the central government has its separate treasury, into which all revenues from import duties and *taxes de consommation* are paid. Direct taxes and a trade tax recently intro-

¹ Ibid., vol. i, p. 324.

² See above, pp. 190-1.

³ Ibid., vol. i, p. 321.

duced are paid into the revenues of the separate colonies, but their yield is not sufficient to meet any extraordinary expenditure, so that they are dependent on the centre for any measures of development. In addition to the cost of its own personnel, the central government is responsible for public works of general interest and for the European courts of law throughout the federation.¹ There is a considerable central service² which is directly responsible for transport facilities affecting more than one territory and for the establishment of institutions for scientific research, but in other matters their function is to act as an inspectorate and advise the Governor-General as to the instructions to be issued to Lieutenant-Governors. The system under which sources of finance are divided, and which in effect makes the 'colony' dependent on the centre for all development expenditure, gives the Governor-General a wide control over the local budget. In general questions of policy also the main lines are determined by the central government, the Lieutenant-Governors being responsible for their execution. They are empowered to issue *arrêtés* providing for the local application of *arrêtés* of the Governor-General, but the subjects on which they are entitled to take decisions without reference to the Governor-General are confined to those specifically delegated to them by *arrêté*. Within the separate colonies administration is again highly centralized; all orders are issued by the Lieutenant-Governor on the advice of the head of the department concerned, and there is a relatively small field of discretion left to the local administrative officer.

(c) *The Three Communes and the Status of Africans as
Citizens or Subjects*

In discussing the institutions for the consultation of local opinion in the French colonies it is necessary to deal separately with the 'four communes'³ of Senegal. The 'four communes' of Saint Louis, Dakar, Gorée, and Rufisque represented the four towns from which the French extended their hold over the hinterland; they were from 1890 to 1920 described as the territory under direct administration, the remainder of Senegal being regarded as a pro-

¹ P. Daresté, *op. cit.*, vol. ii, pp. 43, 104.

² See below, pp. 236-41.

³ Now three: see below, p. 196.

tectorate. At the time of the constitution of 1848 Senegal was endowed, in accordance with the 'assimilationist' theories of that day, with the same adult male franchise which was introduced in France. The law of April 24, 1833, had already provided that all free persons should enjoy equal civil and political rights on conditions determined by law, but this latter phrase has been held from the outset to permit of exceptions to the principle of the complete assimilation of natives to French law. The impracticability of such a step has in fact always been recognized: a Moslem tribunal was established at St. Louis only a few days before the issue of the instructions of 1848 conferring the franchise upon the colonies. Whereas, however, throughout the rest of French Africa there is a clear distinction between persons subject to native customs (*sujets*) and those assimilated to European law (*citoyens*), the latter having identical civil and political rights with Europeans, the inhabitants of the four communes are legally described as *citoyens français* and enjoy the franchise by virtue of that status, though in other matters they remain subject to local Moslem law. The position as defined by legal theorists is that the government of 1848 deliberately conferred the franchise upon the native inhabitants of Senegal without intending at the same time to make them subject to French civil law.¹ They are, however, exempt from provisions of French law which apply only to natives.

The French have tended to interpret restrictively the franchise provisions relating to these communes, which are now generally felt to be unsuited to the various populations to which they have been applied. In 1906 a revision of the registers and the removal from them of names of persons not born within the 'four communes' of Senegal as it existed in 1848 was contested in the courts, which upheld the official interpretation of the law.² In 1916 a decree was passed which defined as *citoyens français* not only all persons born within the four communes but also their descendants. Although the immediate purpose of this decree was to define the persons liable to conscription, it also had the consequence of increasing the numbers eligible for the franchise. A prolonged controversy on the question whether it necessarily also made them subject to French civil law was finally decided in 1932 by the

¹ P. Dareste, *op. cit.*, vol. ii, pp. 331, 518.

² A. Girault, *op. cit.*, vol. ii, p. 571.

introduction of a special civil code for the natives of the four communes and their descendants.¹ The number of natives having the status of *citoyens* in the *circonscription* of Dakar and the colony of Senegal was 78,373 in 1936, while the total native population of these areas numbers about one and three quarter million.²

The constitution of 1848 provided for the election of twelve colonial deputies, one being allotted to Senegal, and this system, annulled under the Second Empire, was reintroduced in 1870. In 1875 provision was made for the election of senators as well as deputies by Martinique, Guadeloupe, Réunion, and the Indian colonies, but Senegal remains represented by a deputy only. It has been pointed out that there is a certain illogicality in this representation, in that the legislation for the colonies does not in the main emanate from Parliament, while the measures passed there are not applicable to the colonies unless this is expressly provided in special cases.³ Nevertheless, the colonial representation makes possible expressions of native opinion in the course of general debates on colonial questions in a way which has no parallel in the constitution of any other colonial empire. It is also not without significance that M. Blaise Diagne, the first Senegalese to be elected as deputy, was, during his long term of membership of the Chamber, on more than one occasion Under Secretary for the Colonies. The election is confined to *citoyens français* and is regulated by the French electoral law.

Local self-governing institutions were introduced in Senegal by the decree of August 10, 1872, which created the communes of St. Louis and Gorée. A commune of Rufisque was created in 1880.⁴ Dakar was separated from Gorée in 1887,⁵ and in 1929 its predominant importance led to the merging of Gorée in the commune of Dakar.⁶ The members of these councils, the *communes de plein exercice*, are elected by adult male suffrage; the mayor is elected by the council from among its members. Since 1910 the majority of the members have been Africans. The powers of these councils were originally modelled closely upon those of the communes in France. They have the right to impose rates, and

¹ P. Dareste, *op. cit.*, vol. ii, pp. 331-3.

² *Annuaire statistique de l'Afrique occidentale française*, 1934-1935, 1936, p. 14.

³ P. Dareste, *op. cit.*, vol. ii, pp. 366-7.

⁴ Decree of June 12, 1880.

⁵ Decree of June 17, 1887.

⁶ Decree of Apr. 9, 1929.

budgetary expenditure requires their approval; they are also entitled to increase the estimates. Their freedom of action in financial matters is, however, limited, as in the case of local government bodies in France, by the division of items of expenditure into obligatory and optional classes, only the latter requiring the consent of the council, a provision which enables the central authorities to insist on the maintenance of services held to be essential. The duties of local authorities in France itself are strictly limited in accordance with the centralized character of French administration; they have no responsibility for the organization of services other than public works of local interest and sanitation; and in Senegal recent enactments have transferred the responsibility for public health from the mayors to European officials appointed by the Lieutenant-Governor.¹ Again, on the constitution of the city of Dakar as a special district under a European administrator in 1924, the powers of the mayors of Dakar and Gorée in connexion with police and with local roadways were transferred to this official, while a corresponding change was made in the other two communes in 1927.² The executive functions of the communal governments are now largely confined to the registration of vital statistics and the like.

A *Conseil Général du Sénégal*, corresponding to the departmental councils of France, was introduced in 1879. It consisted of twenty members elected by *citoyens français*; as these included all persons born in the four communes, they elected African representatives, who were, however, required to be able to speak, read, and write French. Its powers included the imposition of taxation and the management of public property.³ When French administration was extended to the hinterland the scope of the council was confined to the four communes. This limitation was regarded with some resentment by the council, and eventually the demand for a local representative body for the whole colony was met by the creation of a *conseil colonial*, including representatives of both subjects and citizens, an organ which is unique in French Africa.⁴ This body, constituted in 1920, consists of

¹ Decrees of May 6, 1918, and Jan. 25, 1927.

² Decrees of Nov. 27, 1924, and Nov. 15, 1927.

³ A. Girault, *op. cit.*, vol. ii, p. 613; P. Dareste, *op. cit.*, vol. i, p. 123.

⁴ Decrees of Dec. 4, 1920, Mar. 30, 1925, and Jan. 13, 1930.

44 members, of whom 26 are elected by the French citizens of the whole colony, while the remaining 18 are elected by native chiefs from among their number at a meeting presided over by an administrative official; roughly three-quarters of the members of the council are African. It has an executive committee consisting of representatives both of the citizens and both of the chiefs. It may legislate (*statuer*) on matters affecting the management of public property and the contribution of the colony to public works executed by the central government. On these matters its decisions come into effect automatically if they are not vetoed by the Governor-General within two months; it does not, however, appear that the power to legislate is widely used. It may also make recommendations with regard to taxation, but these need the approval of the Governor-General, acting on the advice of the *conseil de gouvernement*,¹ before they come into effect. It may express opinions on questions submitted to it by the Lieutenant-Governor and it is called upon to approve the budget drawn up by him. This is, in practice, its most important function, since discussion of the budget permits of a considerable latitude in criticism of the administration. The actual power over finance is, on the other hand, limited by the standing distinction between *obligatoire* and *facultatif* heads of expenditure. In the colonial budget the obligatory expenses include the service of debt, the maintenance of the administrative services, secret funds, fixed by the Governor-General, and contributions towards the metropolitan or federal budgets. The chiefs as paid agents of the government have tended to form an official opposition to the citizen members, and the history of the council is one of unfortunate bickerings between these parties.

The decree of 1920, which constituted the colonial council, also created a *conseil privé* or executive council advisory to the Lieutenant-Governor, which is organized independently of the elected body. The members of this council are the secretary-general, procurator of the Republic at Saint Louis, military commandant of the colony, a French citizen elected by the chamber of commerce of St. Louis, and one citizen and two subjects nominated for a period of two years.

¹ See below, pp. 200-1.

Within the three communes the *citoyen*, as already shown, comes under French law, modified as regards personal matters by a special native code drawn up for his benefit. Outside the communes there is a clear distinction between *citoyens*, who are subject to statutory law, and *sujets*, who remain under native customary law. A native who wishes to acquire the status of *citoyen*, a process analogous to naturalization, must conform to definite standards. In French West Africa the conditions were prescribed in a decree of May 25, 1912, which may be taken as a manifestation of the reaction from the earlier 'assimilationist' theories of France to the present policy of a more gradual development. The main conditions imposed were that the candidate for citizen status must be 21 years old, be able to read and write French, have given evidence of devotion to French interests, or have been in French employment, public or private, for at least 10 years. In 1932¹ the age was reduced to 18, but further conditions were imposed; the candidate must, with his family, have adopted a civilized manner of life, be monogamous, have had his children educated in French, and have fulfilled his military obligations. A special measure passed in 1918 provided that natives who had obtained the Military Medal or *Croix de Guerre* might obtain naturalization by a simple declaration, but only fourteen persons did so.² In 1935³ the fact of having contracted a civil marriage with a Frenchwoman and being the father of a child by the union was admitted as an alternative to the period of service in French employment.

In 1937 two new stipulations were added: the applicant must have made no demonstration of hostility to France nor have been convicted of any crime.⁴ The legislation of 1937, however, extends the facilities for naturalization in various ways. It allows persons who have obtained the leaving certificates of higher primary or secondary schools to qualify by five years in French service, as against the ten years' service demanded in other cases. It also provides for the unconditional grant of citizenship, on application, to persons who have either received the Legion of Honour, obtained a diploma of one of some thirty-five institutions

¹ Decree of Aug. 21, 1932.

² Decree of Jan. 14, 1918; see P. Dareste, *op. cit.*, vol. ii, 365-7.

³ Decree of Aug. 25, 1935.

⁴ Decree of July 23, 1937.

of higher education in France, served as an officer in the army, or contracted a civil marriage with a Frenchwoman, provided either that children have been born of the marriage or that it has lasted twenty years. Persons of mixed birth are regarded as French.¹ Up to the present the advantages of the shorter term of military service, of assimilation to Europeans in matters of law and justice, and of exemption from the régime of disciplinary penalties known as the *indigénat*,² have not induced a great number of natives to apply for citizenship. The privileges involved appeal to a limited class, and to the majority do not seem to outweigh the necessity of accepting French law in questions of marriage and inheritance. Naturalizations are said not to exceed twenty yearly and in 1936 only 2,136 of the total of 80,509 *indigènes citoyens français* in French West Africa came from colonies other than Senegal; the total native population of the territory in the same year was estimated at 14,700,000.³

In Equatorial Africa the conditions are similar to those which existed in the West African Federation before the introduction of the amendments of 1937.⁴ In the mandated areas of Togo and the Cameroons the conditions are identical with those in force in Equatorial Africa.⁵

(d) *Local Government Councils outside Senegal*

The organization, both of advisory councils to the governors and of local government institutions, is more or less uniform in the colonies of French West Africa, other than Senegal, and in Equatorial Africa.

Each Governor-General or Lieutenant-Governor has the assistance of an advisory council. Since 1920 these councils and the permanent commissions attached to them have included an unofficial membership.⁶ The Governor-General's council is known as the *conseil de gouvernement*, the councils at the capitals of the separate colonies as *conseils d'administration*. In French West Africa the *conseil de gouvernement* consists of the Lieutenant-Governors of the

¹ Decree of Sept. 5, 1930.

² See Chap. VII, p. 278.

³ *Annuaire statistique*, op. cit., p. 19.

⁴ Decrees of May 23, 1912; Jan. 14, 1918; Sept. 6, 1933.

⁵ Decree of Nov. 7, 1930.

⁶ Decree of Dec. 4, 1920.

seven colonies, the administrator of Dakar, the Commissioner for Togoland, and seven other official members.¹ The unofficial members are the deputy for Senegal, the elected members of the *Conseil Supérieur de la France d'Outremer*, the president of the colonial council of Senegal, and elected representatives of that council, the *conseils d'administration*, chambers of commerce,² and certain other bodies; they include both citizens and subjects. This body meets annually and hears a general report and exposition of policy from the Governor-General. Its main duty is to advise on the budgets of the federation and of the separate colonies: it must also be consulted on public works, loans, and direct and indirect taxation. Its recommendations must be confirmed by decree, but are considered as approved if no decree in the contrary sense is issued within three months of their submission to the minister. The permanent commission, which meets once a month, consists of the official members permanently at head-quarters, the deputy for Senegal, and the representatives of the colonial council, Dakar chamber of commerce, and the commune of Dakar.

The *conseils d'administration* of the West African colonies fall into two groups: those of Guinea, the Ivory Coast, the Sudan, and Dahomey are organized on a uniform plan which includes an elective element, while in the other two colonies the membership of the councils differs. In the first group of councils there are three official members, while the unofficial members are: the delegate of the colony to the *Conseil Supérieur de la France d'Outremer*, two French citizens elected by the chambers of commerce and agriculture respectively, and three French subjects elected by a native electoral college. The electorate consists of natives who have spent five years in the administrative service, chiefs of provinces and cantons, licensed traders, owners of registered urban property worth 5,000 francs, and owners of rural property of a fixed area. The permanent commission of these councils consists of the chief secretary, the procurator of the Republic, and one citizen and one subject from among the unofficial members who are present at the colonial capital at the time of its meetings.

The remaining *conseils d'administration*, that is to say, those in the Niger Colony and Mauretania, are constituted on a smaller

¹ Decree of Mar. 30, 1925.

² See below, p. 203.

scale, having as a rule four official members and two to four unofficial, nominated for a period of two years. The permanent commissions are constituted similarly to those of the first four colonies.¹ The *conseil d'administration* must be consulted regarding the local budget and the accounts, direct taxation, loans, the disposal of government property and land, and other administrative matters.²

In Equatorial Africa the *conseil d'administration* consists of the secretary-general, the governors of Ubangi-Shari and Gabon, and three other officials, the delegate of the colony to the *Conseil Supérieur de la France d'Outremer*, four members elected by the chambers of commerce, who must be French citizens, and four members, French subjects, elected by the native electoral colleges. These elected members must be able to speak French. Its competence is similar to that of the *conseil de gouvernement* in West Africa. The permanent commission consists of the secretary-general and other official members of the *conseil d'administration* resident at Brazzaville, one French citizen elected by the local chamber of commerce, and one French subject also elected locally.³

An administrative council was created in each of the mandated territories in 1920, and reorganized in Togo in 1923 and 1934 and in the Cameroons in 1923 and 1928.⁴ In Togo it consists of the chief secretary, heads of the judiciary, customs and public works, and four unofficial members, two citizens and two subjects (technically described here as *ressortissants* in conformity with the principles of the mandatory system regarding nationality) nominated for a period of two years. In the Cameroons the council also includes the head of the health services. These councils have no permanent commissions.

Provision is made in French West Africa and in the mandated territories for the appointment of local native councils advisory to the administrative officials. In West Africa the constitution of such councils was provided for in the decree of May 21, 1919. Such a council may be established in any administrative division where the native population is sufficiently developed. They consist

¹ A. Girault, op. cit., vol. ii, p. 165.

² Decree of Mar. 30, 1925.

³ Decree of Dec. 31, 1937.

⁴ Decrees of Mar. 6, 1923; Apr. 13, 1923; Nov. 3, 1928; Nov. 23, 1934.

of eight to sixteen chiefs or other notables nominated by the administrator for a period of three years, and must be consulted on questions affecting taxes or licences, the organization of *prestations*,¹ and the execution of local works.

Shortly after the issue of this decree fourteen councils were created in Senegal, twelve in the Sudan, and six in Dahomey.² The system was extended to Togo in 1922,³ and the Cameroons in 1925.⁴ In Togo some members of these councils are to be elected by the native people as their representatives, while others are chosen by the chiefs among themselves; a council was created at Lomé in 1922. In the Cameroons there is a native council in each of the fifteen districts. Here, too, the members are selected from lists presented to the administrator; a separate list is drawn up by the native commercial community.⁵ The different tribal groups are represented in proportion to the number of tax payers.⁶

Advisory bodies peculiar to the Cameroons are the local committees on agriculture and public health. The former were first established in 1923, the latter in 1925. The African members of the agricultural councils consist of the recognized chiefs of the first rank (*chefs supérieurs*), and two leading native producers from each subdivision. They meet twice a year to discuss any questions relating to agriculture or stock-breeding which are submitted to them; their first meeting is to be held before the planting season to discuss the programme of production for the year; the second to be held after the harvest for the discussion of methods of preparation of crops for harvesting.⁷ The public health councils consist of the local medical officer with six nominated native members, chiefs or other important persons, and must be consulted on measures of sanitation, the prevention of epidemics, the organization of native urban areas, and any other question affecting public health.⁸

It has already been mentioned that in French West Africa the various chambers of commerce are represented in the advisory organs of government, and their constitution must be described.

¹ See Chap. X, p. 588.

² *Arrêts* of Aug. 24, 1919; Feb. 11, Nov. 1, 1920; Nov. 30, 1922.

³ *Arrêt* of Feb. 17, 1922.

⁵ P. Dareste, *op. cit.*, vol. i, p. 188.

⁷ *Arrêt* of Dec. 30, 1925.

⁴ *Arrêt* of Oct. 9, 1925.

⁶ H. Labouret, *Le Cameroun*, 1937, pp. 27-8.

⁸ *Rapport annuel du Cameroun*, 1926, p. 35.

These bodies, modelled on similar organizations in France, may be created by *arrêté* of the Governor-General. In French West Africa¹ they are divided into chambers of commerce, agriculture, and industry. The former are elected by heads of commercial establishments who must be French-speaking and literate, but need not be French citizens, the total number being fixed in each case by *arrêté*. Eight such bodies exist; the Togo chamber of commerce at Lomé, created in 1921 and reorganized in 1924,² is elected annually by licensed traders organized on a communal basis: the French citizens elect six members, foreign Europeans four, and natives two. These bodies are the recognized representatives of the economic interests of the locality, and must be consulted on all legislation dealing with commercial matters. The chambers of agriculture and industry consist partly of elected representatives of cultivators, partly of delegates of native co-operative and similar organizations: these, however, are not represented in any central advisory body.

In Equatorial Africa a nominated advisory body jointly representative of commerce, agriculture, and industry was created in 1912³ at the head-quarters of each of the four colonies of the federation as it existed at that time. A similar body was created at Fort Lamy in 1916.⁴ In the Cameroons the chamber of commerce of Duala, created in 1921 and reorganized in its present form in 1933,⁵ is elected every two years. It consists of sixteen French citizens, ten foreign Europeans, and two native members.

Both in French West and Equatorial Africa the gradual evolution of local government or institutions on the lines of those of France has been sought through the creation, as a preliminary, of communal councils in which the membership is partly elected and partly nominated, while the chairman is the local administrator who holds his position *ex officio*. The creation of such bodies in Senegal, outside the area of the four original communes, was first provided for by a decree of December 13, 1891, which authorized the establishment of 'mixed' and 'native' communes. These were to consist of native members nominated by the government, with

¹ Decree of Mar. 16, 1917.

² *Arrêts* of June 21, 1921, and Dec. 8, 1924.

³ *Arrêt* of July 31, 1912.

⁴ *Arrêt* of Aug. 4, 1916.

⁵ *Arrêts* of July 22, 1921, and Apr. 26, 1933.

the local administrative official as chairman, the mixed communes having the same powers as the communes already described, and the native communes being purely advisory.

The creation of mixed communes in urban centres throughout the West African Federation was authorized in 1912, and the extension of the native communes to the colonies other than Senegal in 1921.¹ The councils of the mixed communes are divided into three grades, of which the first are nominated, the second elected by a restricted and the third by universal suffrage.² The classes of persons from which the first-degree councils³ may be nominated are the same as those who are entitled to vote for the councils of the second degree. They comprise French citizens, native agents of the administration, and French subjects who pay a trade licence of at least 200 francs, or are recognized as land-owners of importance. The nominated councils must consist of citizens and subjects in equal numbers. The powers of these councils closely approximate to those of the elective communal councils of Senegal.⁴ In 1936 nineteen first-degree and three second-degree councils had been constituted;⁵ so far there is none in which the members are elected by universal suffrage.

The councils of the native communes, as provided by the *arrêté* of January 16, 1921, are to consist of five to ten nominated members, one of whom is nominated as chairman, and are responsible for the execution of administrative orders with regard to police and sanitary services, the organization of markets, *prestation* labour, and conscription and the collection of taxes. It has not, however, been the practice of the administration to appoint many councils of this type.⁶

The extension of the mixed commune to Togo was authorized by a decree of November 6, 1929. A mixed commune with a nominated council was created at Lomé in 1932 and a native commune at Anecho in 1935.⁷

In Equatorial Africa local self-government institutions are less

¹ Decrees of May 15, 1912, and Jan. 16, 1921.

² P. Daresté, *op. cit.*, vol. i, pp. 166-8.

³ The first-degree councils are not to be confused with the *Conseils de Notables* which are described in Chap. IX, p. 493.

⁴ P. Daresté, *op. cit.*, vol. i, pp. 166-8.

⁵ P. Daresté, 'Le régime politique et administratif des colonies françaises'; *Organisation politique et administrative des colonies*, Institut Colonial International, 1936, p. 83.

⁶ *Ibid.*, p. 85.

⁷ *Arrêtés* of Nov. 20, 1932, and Sept. 9, 1935.

advanced. Communes were established at Libreville, Bangi, and Brazzaville in 1911, and Fort-Lamy in 1919.¹ The councils are organized on a uniform basis,² and are simply described as *communes*, since the contrast between the *communes de plein exercice* of Senegal and the councils with an official chairman is here irrelevant. They consist of an administrative official as president and four nominated members, of whom one must be a native, and may make recommendations on financial matters, public property, public works, and the administration of justice.

VII. THE BELGIAN SYSTEM

The political organization of the Belgian Congo, forming as it does a single unit whose status is defined by constitutional statute, can be described more succinctly than was the case with the separate units of British territory in Africa or the two French governments-general.

Its constitution dates from the law of October 18, 1908, which formally effected the annexation of the Free State by Belgium; this law is commonly known as the Colonial Charter. By its provisions the power of legislation for the colony is delegated from Parliament to the King, who exercises it by decree; Parliament, however, retains certain rights, particularly in connexion with financial matters³ and the grant of concessions. Both the budget estimates submitted by the Governor-General and the accounts of the colony (which are audited in Brussels by the *Cour des Comptes*) must be approved by law; the authorization of the *Chambre* is also required for colonial loans and commercial agreements affecting the colony. The grant of concessions is made by decree, but all important concessions must be laid on the tables of both Houses for a period of thirty days before the grant can become effective. In the case of the budget the Minister is empowered, if the *Chambre* has not passed it five days before the opening of the period to which it applies, to give provisional approval by decree for three months at a time, and in urgent cases he may sanction supplementary expenditure subject to the retrospective approval of the *Chambre*.

¹ *Arrêts* of Oct. 3, 4, 5, 1911, and Nov. 8, 1919.

² *Arrêts* of July 10, 1920, Dec. 31, 1924, and Jan. 21, 1925.

³ See Chap. X, p. 593.

In addition to his function as adviser to the King on colonial legislation, the Minister for the Colonies issues instructions on the main lines of policy to the Governor-General, and is largely responsible for the appointment and dismissal of administrative officials. Appointments to the posts of Governor-General, Vice-Governor-General, and heads and deputy heads of services are made by royal *arrêté* on the advice of the Minister; all other appointments of European personnel by the Minister himself.

The Colonial Charter created, as an advisory body to the Minister for the Colonies, a Colonial Council. The council has fourteen members: eight are nominated by the King, three elected by the Senate, and three by the *Chambre*. Neither the elected nor the nominated councillors may be members of either house of Parliament, officials engaged in the service of the administration, or employees of any of the commercial companies in the Congo in the management of which the local government participates.¹ One of the nominated and one of the elected members, from the representatives of the Senate and *Chambre* alternately, retires each year, but may be re-nominated or re-elected. This body must be consulted on all decrees. It gives its opinion in the form of a reasoned report which must indicate the number of members who oppose the decree and their reasons; these reports are published along with the legislation to which they refer, and are a valuable source of information on colonial policy. The Minister has power to override the opposition of the Council, but must publish his reasons for doing so; in practice this power is never exercised.² In case of urgency, decrees may be issued by the Minister without consultation with the Council, but it is still necessary for them to be submitted to it for report, and the Council may censure the use of the urgency procedure if it appears to it to have been unnecessary. The Council has also the right to recommend legislative or administrative measures.

There are no other permanent advisory bodies in the metropolis, though temporary expert commissions have been set up from time

¹ See Chap. XX, p. 1401.

² M. Halewyck de Heusch, *Les institutions politiques et administratives des pays africains soumis à l'autorité de la Belgique*, Institut Colonial International, 1934, p. 12.

to time. An example is the native labour committee which in 1928 drew up a scheme for the restriction of the grant of concessions to those whose demand for labour could be met locally.¹ In 1934, again, a special commission of twenty-seven members, including members of the Colonial Ministry and Ministry of Economic Affairs, and representatives of the principal companies interested in the Congo, the Chambers of Commerce, the Senate, the *Chambre*, and the Colonial Council, was appointed to report on measures for increasing the trade between Belgium and the Congo. The appointment of special commissions of inquiry is uncommon, though mention should be made of the two commissions on native labour which visited the Congo in 1925 and 1931.² In 1933 also the present King of the Belgians, then Duke of Brabant, was entrusted with a mission of inquiry into measures for the development of agricultural production.³

An institution peculiar to the Belgian system is the Commission for the Protection of Natives established in the Congo by the Charter. This body is by its constitution independent of the Governor-General. Its present organization was defined by a royal *arrêté* of August 7, 1925. Its president is the Procurator-General of the Appeal Court at Léopoldville, and there are eighteen members nominated by the King for a period of five years from residents in the colony qualified by their position to judge of native interests. It is required to meet annually and prepare a report, which is published, on the measures which it recommends in the interests of native welfare; its members are expressly empowered, collectively and individually, to report abuses and illegal treatment of natives. Reports have in fact been published only for the years 1911, 1913, 1920, 1924, 1929, and 1931. In 1923 the members of the Commission resident in the Katanga Province (now included in the Province of Elisabethville) were created a special sub-committee for that area, which contains the principal industrial centres of the colony.

The Belgian government has devoted special attention to the publication of material on colonial conditions and to the encouragement of the detailed study of colonial problems. The annual

¹ See Chap. XI, p. 646.

² See Chap. XI, pp. 645-7.

³ *Rapport annuel du Congo belge*, 1933, p. 5.

report on the Congo submitted by the Governor-General is issued for public use. The government finances a periodical, *Congo*, devoted partly to studies in social anthropology and partly to the discussion of administrative questions, which includes criticisms as well as defence of official policy. In 1920 a Colonial Congress was organized under the patronage of the King and the Minister for the Colonies, with the double aim of stimulating popular interest in the Congo and encouraging expert discussion of administrative questions. A permanent bureau was set up which organizes inquiries and prepares interim reports, and further full meetings of the Congress have been held in 1926 and 1930. In 1929 a Royal Colonial Institute was founded with the object of encouraging the study of colonial questions in the universities. It has three sections, dealing with the social, natural, and technical sciences, and it offers annually two prizes for essays on colonial subjects, on set themes of which one is concerned with economics, and the other with native administration.

It has already been noted that the Belgian system of dealing with colonial questions has some unusual features. The *charte coloniale* reflects everywhere the revulsion of feeling against the incidents which marred the administration of the Congo Free State. It repeated for the Congo the fundamental laws of right which formed part of the Belgian constitution, and sought to make it possible for the full force of public opinion to be brought to bear on Congo affairs. The provision that the budget of the colony should be approved by Parliament, a measure found neither in Britain nor France, was directed to this purpose; but it is doubtful if it is the method best calculated to achieve it. It inevitably involves great delays; it has frequently happened that the budget has not been passed till half the financial year has elapsed. In 1923 the *Chambres* sought a remedy in enacting that the budget should be voted biennially instead of annually; this was clearly an unpractical step and was reversed in 1925. As a matter of fact, it has been found elsewhere that Parliamentary interest in colonial finances can be adequately met by making provision for a debate on the vote for the maintenance of the Colonial Office. The provision of the *Conseil Colonial* has proved a more effective measure. It may be true, as its critics have contended, that the sphere of the

Council is limited, since it deals only with legislative proposals, not with executive proceedings, and that if it has been critical, it is of the details rather than the principles of decrees placed before it; but it has certainly succeeded in bringing an informed, and to some extent independent, opinion to bear on colonial policy. The Congo Commission for the Protection of Natives has, as has been shown, had a career of somewhat sporadic activity. It owed its origin largely to the suggestion of Roman Catholic missionaries, and has at times ventilated matters in which the Church was interested; its opportunity for useful work must, however, vary with the need for urging the local and home administrations to give due consideration to native interests, and these have not of late years shown themselves deficient in this respect.

It is clear that whatever the exact nature of the constitutional procedure provided, the Ministry of the Colonies has a predominating voice in regulating Congo policy. The extent to which policy can be said to be initiated locally, or to which it is controlled in detail from Brussels, would appear to depend to some extent on the personality of the Minister and the Governor-General of the time. It is true to say, however, that modern practice does not exhibit the same spirit of centralization as marks the attitude of the French Ministry to the Colonies; there is nothing of the underlying philosophy which regards the colony as actually or potentially a part of the motherland. As regards the formal provisions regulating the position of the Governor-General, the *arrêté royal* of June 29, 1933, reorganizing the administration of the Congo, stipulates that the Governor-General must be consulted on all decrees before they are submitted to the Colonial Council. His right to exercise legislative powers, however, remains limited by the terms of the Charter to cases of emergency. In such cases he may suspend the application of decrees in force or introduce new legislation by *ordonnance-loi*. In either case, however, his acts cease to be valid if they are not confirmed by decree within six months. It will be recognized that a similar provision existed in the constitution of British India, and has been repeated in the recent Government of India Act of 1935. M. Pierre Ryckmans, the present Governor-General, has urged the removal of the limitation of these powers to cases of emergency, and suggests that *ordonnance-lois* should be

valid unless specifically disallowed.¹ In view of the difficulties of communication in the early days of the colony, the heads of the different provinces (then known as Vice-Governors-General) were endowed with similar emergency powers by a law of 1911. The administrative system introduced in 1933, however, did not give such powers to the Provincial Commissioners, who now took the place of the Vice-Governors-General. Certain executive actions of the local authority also require the sanction of a decree. While large land concessions require parliamentary approval, concessions of an area of over 10 hectares in urban and 500 hectares in rural areas must be approved by decree. The Governor-General's annual programme of recruitment for the militia (*force publique*) also requires this formal approval.

In 1914 advisory councils were attached to the Governor-General and to each of the then existing five posts of vice-governor-general. In the system introduced in 1933 the central *conseil de gouvernement* is retained and the older *comités régionaux* are replaced by *conseils de province* attached to the Commissioners of the six provinces. The functions of these councils are strictly advisory and the inclusion in them of unofficial members is left to the discretion of the administrative authorities. The *conseil de gouvernement* as constituted in 1933 included as *ex officio* members the Vice-Governor-General, the *inspecteurs d'état* (senior officials responsible for general supervision of administration throughout the country), the procurator-general, and secretary-general. The six Provincial Commissioners or their representatives were added in 1934.

The *conseils de province* consist of the procurator-general of the province or his representative, the district commissioners, other officials nominated by the Provincial Commissioner, and, at his discretion, unofficial residents in the province of Belgian nationality nominated by him. They draw up financial estimates for the province, and must be consulted on all questions affecting native welfare, defence and police, public works, the financial situation of the province, and questions of general administrative policy. The *conseil de gouvernement* and some of the *conseils de province* at present contain unofficial members.

A step in the direction of the development of local government

¹ P. Ryckmans, *La politique coloniale*, 1933, p. 22.

in urban areas was taken by the decree of January 12, 1923, which authorized the creation of 'urban districts' with their own revenues, administered by a specially appointed commissioner, with an advisory council consisting of three to eight Belgian nationals nominated for two years by the Provincial Commissioner. The council must be consulted on the local estimates, which must also be approved by the Provincial Commissioner; as regards other matters the scope of its discussions is to be fixed by the Governor-General. The one urban district so far created is Léopoldville, the capital of the colony, which attained this status in 1923.¹ The powers at present exercised by the advisory committee were defined in 1929.² It is authorized to initiate the discussion of proposals regarding police, hygiene, control of traffic, building regulations, and the like; it may also be consulted on the organization of hospitals, schools, postal services, and town-planning schemes, and the alienation of land. No local regulations can become effective without the approval of the Provincial Commissioner.

Although the legislation of the Congo provides for the *immatriculation* of natives, or their registration as exempt from native law, on very easy conditions, this process does not result, as it does in French colonies, in their complete assimilation to the legal status of Europeans, and would not qualify them for membership of the various nominated councils which have been described. But in comparing the relative progress made in the Congo and French territories in respect of the inclusion of Africans in advisory bodies or local self-governing institutions, it will be realized that conditions in the Congo resemble those of French Equatorial Africa rather than of the West African federation; administrative activity is in the Congo of relatively recent date,³ and the Congo native has not yet made the same advance in education and social standards as marks the natives of some parts of French West Africa.

The mandated territory of Ruanda-Urundi was organized as a vice-government-general in 1925⁴ and retained this status in the reorganization of 1933,⁵ the principal effect of this position

¹ *Ordonnance* of Aug. 10, 1923.

³ See Chap. V, pp. 140-1.

⁵ *Arrêté* of June 29, 1933.

² *Ordonnance* of Jan. 4, 1929.

⁴ *Law* of Aug. 21, 1925.

being that the head of the administration in the territory has the same limited powers of legislation in local matters that are exercised by the Governor-General for the rest of the Congo. The Vice-Governor-General has no advisory council. The separate identity of the territory is safeguarded by the provisions in the law of 1925 regarding finance and legislation. Measures applied to the Congo do not become operative in Ruanda-Urundi, unless specially applied thereto by the Governor-General. The estimates for Ruanda-Urundi are compiled separately from those for the colony, and no transfers may be made between the funds of the mandated area and those of the rest of the Congo. The Vice-Governor-General is not a member of the *conseil de gouvernement* for the Congo.

VIII. THE PORTUGUESE SYSTEM

The constitution under which the Portuguese colonies are at present governed is based on the Colonial Act of July 1930, which was re-enacted in 1933 upon the adoption of a new constitution by Portugal,¹ and completed by the Colonial Charter of the same year.² While a number of subjects is expressly reserved for legislation by diploma of the National Assembly or decree of the Minister for the Colonies, in the limited range of matters not so specified the heads of the local administration have legislative powers subject to disallowance by the Minister. By the terms of the Colonial Act the matters which need the approval of the National Assembly are: the establishment or modification of colonial constitutions, the conclusion of agreements with foreign powers, the authorization of loans requiring special guarantees, and the determination of the powers of the local administrations as regards the granting of concessions. In emergencies the Minister may legislate on these questions with the consent of the Superior Colonial Council (Council of the Colonial Empire). The act lays down general principles of native policy with which local legislation must conform; these include provisions that native rights in land must be respected when alienations are made and that natives may not be compelled to work for private employers.

The Colonial Charter defines further the respective limits of

¹ Decree-law of Apr. 11, 1933.

² Decree-law of Nov. 15, 1933.

legislative competence of the Minister and the colonial governors. Apart from the subjects reserved for the National Assembly, the Minister legislates by decree in matters of general colonial policy or affecting the interests of more than one colony. Among the questions reserved to him are: salaries and status of personnel, the civil and criminal codes applicable to natives and native labour regulations, control of missions, military organization, freedom of the press (a subject dealt with by Parliament both in French and Belgian colonies), the judicial system, currency, and the approval of loans not requiring the sanction of the National Assembly. His executive powers include the appointment, transfer, and dismissal of administrative personnel, the authorization of public works programmes extending over more than one financial year, and the revision of colonial budgets. The reservations in favour of the Minister are therefore extensive, but their operation is materially modified by the fact that he may expressly delegate any of his powers to a colonial governor.

He has the assistance of two advisory bodies, the Superior Colonial Council and the conference of colonial governors. The former council dates back to a body originally nominated by John IV in 1642. In its present form it consists of members nominated by the Minister, members co-opted by them who must not exceed half the number of nominated members, all colonial governors who may be in Lisbon, and expert members, mainly acting or retired officials, who are attached to the separate sections of the council. There are also sections on finance, agriculture and public works, and industry which normally meet separately. This Council or the conference of governors must be consulted on all legislation except in cases of emergency; it may make recommendations, but only on matters put before it by the Minister.¹

The Governors' Conference is held at Lisbon every three years, the agenda being determined by the Minister. An economic conference² is held every five years, in which delegations of officials and colonists nominated by the governors take part, the agenda being determined by the Minister on the recommendation of the

¹ J. de Penha-Garcia, *Organisation politique et administrative de l'empire colonial portugais*, Institut Colonial International, 1936, pp. 261-3.

² Decree-law of Nov. 15, 1933, and *Arrêté* of Dec. 26, 1934.

governors in council. The advisory bodies at head-quarters include councils on education, on the appointment and promotion of personnel, on public works and mines, agriculture, survey, and employment and emigration.¹

Each colonial governor has an advisory council. The councils of Angola and Moçambique include three senior officials *ex officio*, and two nominated each year by the governor. There are five members elected by recognized economic organizations, who must be of Portuguese nationality and European status and be able to read and write Portuguese. (Persons of mixed birth regularly have European status.) The councils must be consulted on all legislative measures, but they may not make proposals involving increases in expenditure or diminution in receipts. In Portuguese Guinea there is an advisory council including elected representatives of commerce and the municipalities.²

At each provincial head-quarters there is a provincial junta consisting of the provincial governor, three officials, three nominated members, of whom one is selected by the Governor-General and the other two by the provincial governor, two representatives elected either by economic organizations or by the twenty principal taxpayers of the province, and a representative of each local government body in the province. It has statutory powers on matters concerning local finance, public works, and public assistance; it also controls the activities of the municipal governments, and may disallow their measures and modify their estimates.

The minor local government bodies are divided into three classes according to their composition, their functions being in all cases the same. They are responsible for the maintenance of public security and hygiene, the regulation of transport, and the organization of markets, slaughter-houses, and cemeteries. Subject to disallowance by the provincial junta, against which they may appeal to the Governor-General, they control the administration of public property, and the organization of public works up to a maximum which is fixed according to the type of local government. In all these bodies the chairman is nominated. In the municipal councils the other members are elected, two by direct vote of the citizens of the area and the other two by the economic

¹ J. de Penha-Garcia, *op. cit.*, pp. 255-7.

² Decree of Mar. 24, 1928.

organizations or by the twenty principal taxpayers. In the municipal commissions two members are nominated and two elected by the indirect process mentioned above. The local juntas have one nominated member and one member elected by the indirect process.¹

Part of Moçambique is administered by the Moçambique Company, which possesses a royal charter granting it sovereign rights for 50 years from 1891. The Colonial Charter of 1933 provides for the transfer of the powers of the company to the Portuguese government as soon as this can be effected in agreement with the company.

Part of the system outlined above is the result of a reorganization effected in 1933 and the following years, which is not yet in full operation; much indeed appears to have been left for determination by rules of practice. Portugal has not yet organized the systematic supply of information on the lines adopted, for example, by Belgium; and it is not easy to ascertain the extent to which some of the institutions referred to have been brought into operation.

IX. THE PERMANENT MANDATES COMMISSION

Mention must be made of the system of supervision of colonial administration which exists in the case of the former German colonies now held under mandate from the League of Nations: South-West Africa, administered by the Union of South Africa, Tanganyika by Great Britain, Ruanda-Urundi by Belgium, and Togoland and the Cameroons, each of which is divided into a French and a British section. It is not necessary to deal here with the history of the mandatory system, for which ample material exists elsewhere, nor with some of the issues of a legal or technical nature to which the operation of the system has given rise. Whether the authority derived from the exercise of a mandate is sovereignty or not; whether the mandatory power is the sole source of legislation for the municipal courts of the territory, or whether they must take cognizance also of the agreements entered into by the mandatory; whether the powers who have left the League can legally claim the same position as those remaining in

¹ Decree-law of Nov. 15, 1933.

it, in respect of equality of treatment in economic matters; these and questions of a similar nature are mainly of juridical interest. In dealing with South-West Africa¹ and Tanganyika, reference has been made to a further question, that of the incorporation of a mandatory area in, or its federation with, the neighbouring territory of a mandatory power; but this again is an issue of which the decision is likely to depend on other than juridical arguments. It is, on the other hand, important to examine the extent to which the existence of the mandate is able to influence the actual course of administration in the areas concerned.

It is convenient to remark in the first place on the nature of the difference in the terms of the two forms of mandate in force in Africa.

Of the African mandated areas, South-West Africa stands alone in the C class, which are described in the League Covenant as those which can best be administered by the mandatory as integral parts of its own territory.² This provision is not, however, entirely peculiar to the C mandated areas, since each of the separate mandates of the B class, to which the other African mandates belong, authorizes the administrative union of the mandated area with neighbouring territory, subject only to the stipulation that measures adopted to that end do not infringe the provisions of the mandate.³ The essential difference between mandates of the B and C class is that in the case of the C class the mandatory is not obliged, as he is in a B mandated area, to accord equality of treatment with his own nationals to nationals of other states-members of the League of Nations, in respect of economic matters. Both types of mandate guarantee freedom of conscience and religion; both prohibit the fortification of mandated territory and the recruiting of troops there for service outside, though in the French territories an exception to this proviso is authorized 'in the case of a general war'; both require the mandatory to suppress the slave trade and the liquor traffic. The B mandates contain two provisions regarding native policy which are not included in those of the C class; land legislation must take into account the rights and interests of the native populations, and compulsory

¹ See above, pp. 177-8. ² *Covenant of the League of Nations*, Art. XXII, para. 6.

³ See above, p. 181.

labour, except for essential public works and services, must be prohibited. Although, however, these clauses do not appear in the C mandates, it is reasonable to hold that the principles which they embody are essential to that 'well-being and development' of native peoples which is stated in the Covenant to be the aim of mandatory administration. In order to provide machinery for observing the manner in which the mandatory authorities comply with the terms of their mandates, the Covenant of the League itself stipulates that each mandatory shall render to the Council an annual report of its administration, and that an expert body advisory to the Council should be constituted to examine these reports.¹ This body, the Permanent Mandates Commission, consists of persons nominated by the Council and removable only by it, who must not be in the employment of any government and are not technically national representatives. Its constitution provides that the majority of its members must be nationals of non-mandatory Powers, and one must be a woman. In practice this has given an original composition of nine members selected from Great Britain, France, Belgium, Japan, Spain, Portugal, Holland, Italy, and a Scandinavian Power. During the period when Germany was a member of the League of Nations a German was added, but retired on Germany's withdrawal from the League in 1933. The Italian member similarly withdrew in December 1937 after Italy's resignation had been announced. The Japanese member, on the other hand, has continued to participate in the work of the Commission, since Japan on withdrawing from the League did not relinquish her mandate. In addition the Commission now has on it one extraordinary member, and when questions concerning native labour are discussed the director of the Native Labour Section of the International Labour Office is present in his expert capacity.

Each mandatory is required to submit to the Commission an annual report on lines indicated by it, and must furnish it with copies of all legislation passed and all special reports published in the course of the year. These annual reports must be published, a provision involving a departure from the usual practice in the case of the French colonies, where such documents are treated as con-

¹ Art. XXII, paras. 7 and 9.

fidential. In the case of Great Britain, where the annual reports from all colonies and protectorates are regularly published by the Colonial Office, those from the mandatory areas tend to be fuller than those from other territories. Further, inhabitants of the mandated areas have the right to submit petitions to the Commission, though not to be heard in person.

The Commission holds two meetings a year, for the examination of these reports. An accredited representative of the mandatory concerned is present at the discussion of each, to give explanations and supplement the information contained in the reports. This representative is usually a senior official of the Colonial Ministry or of the local administration; sometimes both attend together. A report is then prepared for submission to the Council containing comments on the salient points of the administration of each mandated area, and it is for the Council to convey the observations of the Commission to the various mandatories. There is also a general discussion on questions affecting mandated areas, as part of the discussion of the work of the Council in the preceding year which is held at the annual session of the League Assembly. The sessions of Assembly and Council are open to the public; those of the Mandates Commission are private, but a record of the proceedings is published.

The institution of this Commission has resulted in the publication of a considerable body of information concerning colonial conditions, and has made possible valuable exchanges of views between persons in positions of administrative responsibility and experts with experience of different colonial systems. Only those who have had experience of the internal working of an official administration, in circumstances where there is no organization of public opinion, can appreciate the strength of the influence which can be exerted by publicity of the nature of that involved in the proceedings of the Commission and Council. It is significant that in the earlier days of the legislatures created in the British dependencies, the power of interrogation has been valued more highly than that of passing resolutions or motions, or even of voting on a budget. It is not surprising, therefore, that many consider the value of the proceedings of the Commission and Council to lie in the indirect influence of publicity rather than in direct influence

over policy. There are indeed certain difficulties inherent in the form which the mandates have taken. They indicate general policies, necessarily in wide or even negative terms. But experience shows that within the scope of general objectives such as those indicated there is room for a great variety of methods of approach. Subsequent chapters of this Survey will illustrate the wide divergence of the methods used in native administration,¹ in education,² or in treatment of land rights;³ yet it would not be possible to say that any one of the methods used is contrary to a principle capable of so many interpretations as the 'well being and development' of the native populations. In the evaluation of administrative policy the unanimous acceptance of definite standards is not to be expected in a body where many different administrative traditions are represented; it is unlikely, therefore, that the mandatory system will result in the development of uniform methods of administration or in the acceptance by the mandatories of a philosophy of rule in their mandated areas which differs greatly from that prevailing in their own colonies. The Commission is on its strongest ground in dealing with legal questions, and is at times able to point to definite breaches of the mandate, but it would be quite impracticable for it to attempt to control the mandatories in the sense of ordering the application or suspension of specific measures, and its reports usually consist of requests for further information, or in expressions of hope that the next annual report will indicate an improvement in an unsatisfactory situation. Nevertheless, the effectiveness of these comments should not be measured entirely by the form in which they are expressed; in matters where the criticisms can be met without a departure from any major principle of administration accepted by the mandatory, they clearly influence its actions.

X. ADMINISTRATIVE STAFF

(a) *Union of South Africa*

The organization of the civil service in the Union is based on the Public Service Act of 1923. Apart from the professional and technical sections, and the general division, which is made up of

¹ See Chap. IX.

² See Chap. XVIII.

³ See Chap. XII.

the lower-paid clerical grades, artisans, nurses, and the like, it includes an administrative and a clerical division, the former being recruited mainly from the latter. Candidates for entry into the clerical division must have passed the matriculation examination or its equivalent;¹ but it has become the practice to appoint only graduates or first-class matriculants. In 1935 an examination test was introduced, but appointments were not made dependent on the order in which the candidates were placed. The examination is a test of general knowledge, accuracy, and ability to use the two official languages.²

The Union has an unusual feature in the position assigned to its Public Service Commission, which is not only an appointing authority for the posts above mentioned, but was, by the Act of 1923, made responsible for recommending such reorganization of departments as would promote economy and efficiency, and for recommending to the Minister the persons to be selected for all appointments and promotions in grades other than the general division; recommendations of this type, in which the majority of the Commission concur, could not be disregarded without the sanction of the Governor-General. This provision has an interesting history originating with the attempt to balance the claims of the Dutch and British communities in the public service after the Act of Union. The Commission consists of three members; it has been the practice to appoint both Afrikaans and English-speaking members, and the question which section has two members in the Commission is of some importance. At present there are two English and one Afrikaans-speaking member. There have been instances in which the Governor-General has rejected the Commission's recommendations on the advice of the Minister, and such cases have concerned posts of major importance. It is alleged that in many cases the Minister omits to take action on the Commission's recommendations.³ When the Government Attorney's Office was created in 1925 it was provided that its staff should be appointed by the Governor-General without reference to the Commission.⁴

¹ Act 36 of 1936.

² Government Notice 935 of 1934.

³ Union of South Africa: *Debates of the House of Assembly*, vol. xxvi, 1936, p. 362.

⁴ E. H. Brookes, in *Coming of Age*, 1930, p. 342.

An amending act introduced in 1936 provided that recommendations of the Commission should automatically come into force unless expressly overruled by the Governor-General within six months. With regard to discipline, however, a number of changes are made which increase the opportunities for political control in the service and reduce the scope of the Commission's supervision. The Act of 1923 made a distinction between cases of serious misconduct, which were to be investigated by the Commission, and of misconduct not regarded as serious, in which the Minister for the Interior would appoint an official to investigate. This distinction is now removed, and all charges are now to be investigated by an official appointed by the Minister, subject to an appeal to the Commission, whose decision is final.¹

The organization and functions of the Native Affairs Department with its various specialized sections, and the provision for the administration of native affairs in the mandated territory of South-West Africa are discussed elsewhere.²

It is clear that, in spite of the position assigned to the Public Service Commission in the Union, appointments to and promotions in the public service are still liable to be dependent on political considerations. The political and social circumstances of the Union are admittedly of an unusual nature; and it would perhaps in any case be difficult to secure for the services in the Union the degree of detachment which characterizes their position in Great Britain. In one respect, however, criticism seems justifiable. The Union has done little to equip the officers of the Native Affairs department with special training.³ In the past, many men have come into the service with a special knowledge of native language and custom, and the administration of the Transkei in particular owes much to this class; but the department cannot count on the continued recruitment of men with these special qualifications.

(b) *Southern Rhodesia*

The organization of the civil service in Southern Rhodesia is defined by the Public Services Act 29 of 1931. The administrative

¹ Union of South Africa: *Debates of the House of Assembly*, vol. xxvi, 1936, p. 366.

² See Chap. IX, pp. 363-76.

³ See Chap. II.

and clerical branch consists of senior and junior divisions, the former comprising all officers in receipt of salaries in excess of £605 per annum. The policy of the government is to give preference in recruitment to applicants from the territory. No obligatory examination is set and, in pursuance of the policy of giving preference to Southern Rhodesia candidates, vacancies are sometimes filled by applicants who leave school without passing matriculation. Selection is made by a Public Service Commission. The normal retiring age is 60 for men and 55 for women.

An officer of the British treasury, Mr. A. Glen, who was appointed in 1935 to inquire into the administrative system, expressed a doubt whether sufficient officers of the calibre necessary to fill the highest administrative posts would be obtained so long as the field from which they are drawn is so strictly limited, and recommended the imposition of higher qualifications for entry, even though this might make it impossible to fill all the vacancies by local recruitment; in such circumstances, he held, the service would benefit by the appointment of candidates from outside Rhodesia, who should if possible be university graduates.¹

All appointments are probationary for a period of two to five years, and in order to qualify for confirmation every official must pass an examination set by the department to which he is attached. In the Native Affairs Department this examination is concerned with native languages and custom.

Liberal arrangements are made to enable an officer to take a post-graduate or refresher course at a recognized university or professional institution;² provision is also made for the purpose of obtaining teaching or experience in technical subjects. Fellowships for study in Europe are awarded by the Beit Trust; one special fellowship for anthropological study in England was awarded by the South African Institute of Race Relations in 1935; study leave was granted to six officers to enable them to attend a four months' course in African studies at Capetown University.

The division of administrative functions between magistrates and native commissioners, according as the district concerned is predominantly native or European, is similar to that followed

¹ *Report of the Commissioner appointed to enquire into the administrative system of Southern Rhodesia*, C.S.R., 1—1936, p. 8.

² Government Notice 772 of 1936.

in the Union.¹ It was suggested in Mr. Glen's report² that in view of the overlapping of their functions a fusion of staffs would be desirable in itself, apart from the economies which would result; the objective should be to make the junior staffs interchangeable at those stations where there is a magistrate of the judicial department with an assistant native commissioner.

(c) *The British Colonial Service*

Uniform conditions regarding recruitment and training are in force throughout the British colonial territories. Colonial Regulations of general application limit the governor's power of appointment to posts carrying an initial salary of £200 a year, or, subject to the Secretary of State's approval, £200-400; in no case may he appoint persons not resident in the colony. Except for certain local variations from this principle of a minor character, all other appointments are made by the Secretary of State.³

Appointments to the administrative staff of the tropical African dependencies are made by the Colonial Office after selection on the basis of the candidates' qualifications and record; in recent years the candidates selected have all been in possession of a university degree, usually with honours. A university degree is not, however, an indispensable condition of appointment, and has sometimes been dispensed with when candidates have come forward with special experience. A year's course of training at government charge is given at Oxford or Cambridge. The subjects of instruction include the principles of law; elementary surveying and field engineering; African colonial history, geography, and anthropology; tropical economic products, agriculture, and forestry; tropical hygiene and sanitation; phonetics and African languages. It is obvious that, given the time available, instruction in some of these subjects can only be of a most summary character.

Africans have been appointed to senior posts, chiefly in the judicial, medical, and agricultural departments, and also in the secretariat. These are described later in connexion with other African staff.⁴ No African district officer has yet been appointed.

The administrative branch of the colonial service was constituted

¹ See Chap. IX, p. 368.

² Op. cit., C.S.R. 1—1936, p. 9.

³ *Colonial Service. Recruitment No. 2*, 1936, pp. 10-13.

⁴ See below, p. 235.

as a unit in 1932, but owing to the importance attached to local knowledge and experience, transfers from one colony to another are not frequent, except in the case of governors and colonial secretaries, who are normally not appointed to the territory in which they have done most of their service, and to some extent in the case of the higher officials in the secretariat. An officer cannot be compelled to transfer to a colony offering less favourable terms than those on which he was engaged to serve.¹

The initial salary is £350 in the East African and £400 in the West African dependencies. After two years service on probation as a cadet, salaries rise by regular increments, subject to 'efficiency bars' at £600 in East Africa and £630 in West Africa, and at £840 throughout the service, to £1,000, the maximum for a district officer. Cadets are required to qualify for confirmation of their appointment by passing examinations in law and in a native language, and in order to pass the efficiency bars officers must pass additional language examinations and obtain a certificate of efficiency from their superior officer. Senior posts carry higher salaries; this applies to the position of Provincial Commissioner or Resident (the term used in Nigeria), to the senior positions in the secretariat, and to certain major posts peculiar to individual territories. The table on p. 226 shows the actual position as regards staff in the various territories.

Provisions regarding leave vary in the different territories. Northern Rhodesia has a tour of service of 20-36 months; in Nyasaland and Uganda the tour is 2-3 years; in Tanganyika the tour is 20-30 months; in Kenya officers with less than 10 years service serve a tour of 3-4 years, those with over 10 years service have a tour of 2-3 years. In West Africa the tour varies from 12 to 24 months. The period of leave differs correspondingly; free passages are provided with allowances towards the cost of passages for wives and in East Africa for children. The age of retirement is 50 in West Africa; in East Africa it was raised to 55 in 1933.²

In the British dependencies the secretariat does not form a separate service as is the case in the French and Belgian colonies; the practice varies, but in some colonies it is staffed, as far as the junior posts are concerned, by seconding members of the general

¹ *Colonial Service. Recruitment No. 2*, 1936 p. 10.

² *Ibid.*, 1937, pp. 52-9.

TABLE III
British Colonial Service Staff

	Administrative			Agriculture Veterinary Forestry			Education			Judicial Legal			Medical and Health Service			Military and Police			Railways and Transport			Public Works			Miscellaneous		
	Colonial Service	Local Service		Colonial Service	Local Service		Colonial Service	Local Service		Colonial Service	Local Service		Colonial Service	Local Service		Colonial Service	Local Service		Colonial Service	Local Service		Colonial Service	Local Service		Colonial Service	Local Service	
Nigeria (& British Cameroons)			386			167			109			37			246			188			347			235			333
Gold Coast (& British Togoland)			91			84			18			23			141			100			127			119			139
Sierra Leone			40			15			6			6			27			34			35			24			28
Gambia			11			3			..			3			13			10			..			9			12
Tanganyika			185			138			43			24			152			120			†147			62			151
N. Rhodesia			109			39			76			17			69			91			11			22			220
Uganda			83			79			29			19			108			*72			..			74			71
Nyasaland			51			33			10			6			34			*37			5			29			75
Zanzibar			20			11			6			8			22			*8			..			12			12
Somaliland			16			2			1			1			5			*21			..			2			7
Bechuanaland			20			36			3			8			27			51			..			36			35
Basutoland			32			28			9			3			37			*16			..			5			39
Swaziland			15			18			18			..			12			*26			..			5			14
Kenya	126	38		61	102		58	79		19	4		124	38		78	86	..	24	60						\$106	\$270

* Includes Prisons.

† Includes Harbours.

‡ Service common to Kenya and Uganda.
§ Under Miscellaneous are included Customs, and Posts and Telegraphs, in the former of which the service is common to Kenya and Uganda, and in the latter to Kenya, Uganda, and Tanganyika.

administrative staff. It is also the practice to maintain contact with the Colonial Office both by the temporary attachment to the Colonial Office of junior officers selected from the administrative service and by seconding members of the permanent staff of the Colonial Office for temporary service overseas.¹

In the past a number of the East African territories—Northern Rhodesia, Nyasaland, and Tanganyika—have had at head-quarters a Secretary for Native Affairs whose function was to co-ordinate native administration throughout the territory and, as a member of the executive council, to give expert advice to the Governor. In Northern Rhodesia this post was abolished in 1934,² it being held that the advice formerly tendered by the Secretary for Native Affairs could equally be given by the Senior Provincial Commissioner. The mode of control of native affairs envisaged was that policy should be agreed upon in an annual conference of provincial commissioners with heads of departments; a special selected officer of the administration should be posted to the secretariat as Assistant Secretary for Native Affairs, and would keep in touch with provincial commissioners on questions of policy.³ Tanganyika appointed a Secretary for Native Affairs in 1925 at the time of the introduction of indirect rule. In 1934 this office was merged with that of Deputy Chief Secretary, the reason given being that the supervision of native affairs should be the concern of the whole administration rather than of a specialist officer. In Nyasaland the Senior Provincial Commissioner was appointed Secretary for Native Affairs in 1931; in the following year the post was abolished as a measure of economy. Kenya appointed a Chief Native Commissioner in 1918; his position and functions have been the subject of some discussion.⁴ In the Gold Coast the Secretary and Assistant Secretary for Native Affairs are secretarial officers.

The British territories are generally divided into provinces in charge of senior district officers entitled Provincial Commissioners or (in Nigeria) Residents, who administer the area, under directions of the Governor conveyed through the secre-

¹ *Report of Committee on the system of appointment in the Colonial Office and the Colonial Services*, Cmd. 3554, 1930, pp. 40-50.

² For proposals concerning it see Sir A. Pim, *Report*, op. cit., Colonial 145, 1938, pp. 158-60.

³ *Legislative Council Debates*, Dec. 1934, pp. 15-16.

⁴ See Chap. IX, p. 393. See also *Report*, op. cit., Colonial 116, 1936, pp. 62-5.

tariat. Provinces are subdivided into districts in charge of administrative officers called District Commissioners, assisted by junior administrative officers and cadets. A District Commissioner receives his instructions from the Provincial Commissioner, and this officer, as the channel of communication with head-quarters, has complete control of the administrative functions of the district staff. In Nigeria Chief Commissioners over groups of provinces have their own secretariats and form the link between the Provincial Commissioner or Resident, and the central secretariat, a system which originally reflected the marked difference between the conditions of the Northern and Southern Provinces; it may be doubted whether to-day this does not tend unduly to diminish the position of the Resident and to increase difficulties of departmental co-ordination.

The problem of co-ordination arises not in respect of the ordinary work of administration, but in regard to the relations of the technical departments to the district and provincial authorities. In earlier times this question of co-ordination assumed little importance, but the growth of technical services and the complexity of the functions of district officers have raised problems that may be said to have two aspects: the first concerns the effectiveness of this system in allowing for the most economical use of staff, and the second, the development of systems of indirect rule which have local self-government for their avowed object and which, for the time being at least, must remain under the close supervision of the district officer.¹

It is one of the conditions of rapid development that technical staffs should grow quickly in personnel, should take an increasing part in activities which directly touch the life of the people, and should absorb an increasing share of the general revenues. In countries with responsible governments, these activities come under the control of ministers with joint responsibility; in India, a solution was found in bringing them under the charge of an executive council in which the departments of government are grouped under and controlled by authorities who are part of the government, mutually responsible to their colleagues but themselves detached from departmental work. In the absence of some

¹ See Sir F. D. Lugard, *The Dual Mandate in British Tropical Africa*, 1929.

such system of control there is always a danger that the administration may show evidence of unbalanced working. The absence of co-ordination is seen most markedly in such departments as those of health, sanitation, agriculture, or veterinary work. Departments tend to trench on each other's field of work, with the result that there is not only overlapping but even, at times, a conflict of policy. Much can be done towards the co-ordination of policies by mutual discussion between heads of departments and local authorities, but the direction of policy cannot rightly be settled by inter-departmental compromises. In theory, the Governor is the controlling agency, but he is to a great extent dependent on a Chief or Colonial Secretary who may find the burden excessive. The difficulties of the position of a Chief Secretary as the sole co-ordinating officer and the principal channel of communication with the Governor in a complex administration were detailed in Sir Alan Pim's report on Kenya.¹ It was there suggested that the system of concentrating every branch of work in this officer should be replaced by one in which the various departments should be grouped under several secretaries to government, each secretary standing in the same relation to the Governor, the Colonial Secretary remaining as Chief Secretary, the deputy of the Governor, and the head of the administrative service. For Kenya, three secretaries were suggested, a Colonial or Chief Secretary, a Secretary for Native Affairs, and a Financial Secretary. In many of the African dependencies conditions would not justify the creation of an executive council of the Indian type; but failing this a solution may be found by a reorganization of the secretarial system on the lines advocated by Sir Alan Pim. The principle may be said to have to some extent been recognized in Kenya itself and in other colonies such as Tanganyika,² Uganda, Northern Rhodesia, and Nigeria, where financial secretaries are to replace the present heads of treasuries. Under the system proposed, the secretaries would refer to other secretaries matters likely to affect them; they would be responsible to the Governor for bringing to his notice matters in which there were departmental differences, or which

¹ *Report*, op. cit., Colonial 116, 1936, p. 71. Sir A. Pim made the same criticism in Northern Rhodesia: see *Report*, op. cit., Colonial 145, 1938, pp. 160-1.

² *Tanganyika Annual Report*, 1937, p. 24.

are likely to affect the public or influence general policy. It is a sound rule also, that while secretaries have authority to deal with details, they must disclose to the Governor any case in which it is proposed to overrule the recommendations or criticize the action of heads of departments, or the senior administrative officers.

The technical departments deal with problems the right handling of which is vital to the future of Africa. In any adjustment which is made, it is essential to avoid anything which would impair their enthusiasm or prejudice their independence in technical matters and in the maintenance of the discipline of their own establishments. But the need for closer co-ordination of work has been increased by the growing use made of native authorities as agencies of local self-government. It was once stated that in Kenya, for example, every department was a complete unit, and important administrative health work was divorced entirely from the direction of the administrative officer.¹ Such a restriction of the activities of the administrative officer might negative his influence with native authorities and expose these to a pressure of demands which they might not be able to bear. It has been well said that 'the general control of Administrative Officers is vital to the success of indirect rule, especially with immature native administrations, but it throws a serious responsibility upon them to understand and to assist the work of the Departments'.² Sir Donald Cameron's instructions regarding the relations between administrative officers recognize the increasing part which departmental officers must in future play in the development of the native administration, and he insisted on the subordination of these activities to the administrative officer, who 'must be regarded as the judge of the effect of any activity on the conditions of the province, political or otherwise, from the native point of view'.³ What, however, has been suggested in the preceding paragraph is not subordination, but machinery for obtaining joint direction at the top, which would involve in turn the necessity for joint action below. The reorganization of district and provincial boundaries that has taken place in recent years, in

¹ J. L. Gilks, 'Public Health in Rural Africa,' *Journal of the Royal African Society*, vol. xxxiv, 1935.

² M. Perham, *Native Administration in Nigeria*, 1936, p. 301.

³ *The Principles of Native Administration and their Application*, 1934, p. 41.

Northern Rhodesia and Tanganyika for example, has allowed for a strengthening of the position of the Provincial Commissioner, by grouping large areas, containing districts with similar problems and kindred tribes, under one administrative head. The enlargement and reorganization of provinces and districts in order to allow for the employment of a subordinate staff in disposing of much routine work which in a small district is done by the administrative officer himself, is indeed a measure which has suggested itself in more than one colony.¹ It is clear that the administrative head should be relieved of petty and office work if he is to have the time to deal with the problems which arise when the work of the technical departments comes into contact with that of the officers of the general administration.

Nothing impresses itself more forcibly upon the observer of African administration than the frequent transfers of administrative officers from one station to another. An analysis of changes of staff in Kenya shows that one officer was posted to as many as 11 different stations in 6 years. The problem is, however, by no means peculiar to East Africa; it exists possibly in a more acute form in West Africa. It is of exceptional difficulty owing to the shortness of the period of 'tour' necessitated by health and living conditions in the African colonies.² The period of 'tour' has been gradually extended to meet the progressive improvement in conditions of living, and most expert evidence seems to oppose a further extension at the moment. The question of the frequency of transfer is, however, one which invites the most earnest attention. Universal experience shows that lack of continuity in the administrative services produces one inevitable result—the decay of the factor of personality and the substitution of a mechanical routine of administration. The mischief is accentuated in areas under indirect rule, where success depends on the personal relations between district officers and native authorities, and demands on the part of the former an intimate knowledge of the language and customs of their areas.

Though in principle officers of the colonial service are liable to

¹ *Report*, op. cit., Colonial 116, 1936, pp. 92–102. *Report on the Financial and Economic Position of the Bechuanaland Protectorate*, Cmd. 4368, 1933, pp. 58–63.

² See above, p. 225, and below, pp. 237 and 242.

transfer to any of the British colonies, in practice, transfers from Africa, or indeed from one colony in Africa to another, are infrequent except among the higher branches of the service. But this type of transfer, involving mainly officers of the standing of Governor or Chief Secretary, produces its own difficulties. A change of Governorship may coincide with one in the office of Chief Secretary; neither of the new incumbents may have had previous experience of the colony, and may perhaps have had only a limited experience of Africa.¹ It is contended that the system gives the African colonies the benefit of experience of service outside Africa; and enables the Colonial Office to try out its senior officers in some of the smaller governorships in its charge before appointing them to important charges in Africa. It may be doubted whether the experience gained in some of the outlying dependencies of the Empire is of any material value in solving the problems of Africa. The system does not secure a governor in the tenure of his post for a fixed number of years; and where the tenure of the head of the administration is of uncertain duration, routine problems are apt to exclude the consideration of general policy, and attention concentrates on the efficiency of the machinery of government rather than on the direction in which the machine itself is going. It is a matter for consideration whether the strength of the establishments now employed in Africa, and the importance of the issues of policy which now present themselves, do not afford strong reason for constituting a separate branch of the colonial service, confined to employment in Africa.

One other general observation appears to be justified. The organization of administrative work in Africa is still, in a technical sense, in a somewhat elementary stage. District officers are still overburdened with routine work which, in modern conditions, could suitably be discharged by subordinates. This point will be further discussed at a later stage.² But in addition, the system of accounts appears to be imbued with traditions of an age when the staff were recruited from sources which did not always leave their integrity beyond suspicion. Elaborate precautions are taken to prevent the loss of amounts of money, or irregular expenditure, by

¹ See Northern Rhodesia, *Legislative Council Debates*, May 31, 1938.

² See below, pp. 233-5.

systems of accountancy which are an added burden to the administrative officer, who is more often than not a sub-accountant responsible to the Treasurer for the expenditure of other departments as well as from his own vote. The Audit Department carries out a detailed check on the expenditure of the smallest amounts; yet in some dependencies the Treasury duplicates all this with its own system of checking, and Provincial Commissioners are sometimes so eager to protect their officers against Treasury investigations that they also conduct a detailed examination of accounts.

(d) Subordinate Staff in the British Colonial Dependencies

In the early days of British administration in East Africa subordinate personnel were recruited from India in the absence of qualified Africans. The terms of service of the Asiatic staff in Nyasaland and Uganda continue to be regulated on the assumption that they are normally persons whose homes are in India. In Uganda, however, Asiatics are now not in principle appointed to posts for which qualified Africans are available. In these territories the Asiatic staff consists of three grades whose salaries rise from £90 to £300. Both in Tanganyika and in Kenya local civil services have recently been constituted, consisting, in Tanganyika, of a unified service for Asiatics and Africans, and in Kenya of separate services for Europeans and Asiatics.

In Tanganyika the institution of such a service was first proposed in 1933,¹ with the dual aim of effecting economies in the payment of Asiatic personnel and providing openings for the employment of educated Africans. The policy enunciated in 1933 was to recruit Asiatics from outside the territory only where special qualifications are required, as for example for the medical and legal departments, and for other posts to make no differentiation in conditions of service between Africans and Asiatics, the African civil service, created in 1927, being merged in the new local service. Regulations constituting this service were issued in 1935.² The salary scales previously in force were 30s. to 360s. a month for Africans and 150s. to 600s. a month for Asiatics; on the new uniform scale learners and apprentices receive 30s. to 60s. a

¹ *Governor's Dispatch to Secretary of State, Sessional Paper, no. 10, 1933.*

² *Regulations for the Local Civil Service, 1935.*

month, and salaries in the fixed establishment rise by five grades from 60s. to 500s. Asiatics, however, will normally enter at Grade III with an initial salary of 137½s. a month.

In Kenya the desirability of reducing expenditure on personnel was explained by Sir Edward Grigg when Governor in 1926.¹ In 1931 unofficial opinion urged as a means to this end the constitution of a subordinate branch of the civil service, locally recruited, which would have the additional advantage of offering employment to the local European population. This service was constituted in January 1935.² The normal educational qualification is the Cambridge Junior Examination. Salaries in the fixed establishment range from a minimum of £150 to a maximum of £660. Overseas leave is given on a basis which makes a visit to Europe possible every four years.³ The number of posts scheduled for inclusion in the local service was 729, the majority being in the departmental services. Of these in January 1933 only 7 per cent. were filled by persons locally born or locally educated, and it appears that in effect the new service must continue for some time to be recruited from overseas, and that the less attractive conditions offered in it must be justified by the lower qualifications required of its members rather than by the fact that members of this branch are not serving at a distance from their homes.

A local Asiatic service was also inaugurated in Kenya in 1935.⁴ The minimum salary is £90, the maximum £408. It is pointed out that the great majority of the Asiatic civil service are persons whose homes are in Kenya. The creation of these separate services met with strong opposition from the Indian members of the legislative council as a measure of racial discrimination.⁵

In Uganda the conditions of employment in the African civil service were laid down in 1929.⁶ Professional or educational qualifications are required; leaving certificates of approved institutions of higher education are accepted as qualifying for entrance; in their absence a candidate must pass a special examination. The

¹ *Legislative Council Debates*, 1926, vol. i, pp. 272-4.

² *Kenya: Secretary's Circular*, no. 2, Jan. 28, 1935.

³ European Civil Service Provident Fund Ordinances, nos. 27 and 65 of 1934.

⁴ *Kenya: Secretary's Circular*, no. 15, May 18, 1935.

⁵ *Legislative Council Debates*, 1934, vol. ii, pp. 965-81.

⁶ Permanent African Civil Servants' Regulations, 1929. See also *Higher Education in East Africa*, Colonial 142, 1937, p. 28.

maximum salary payable, except in the case of promotion to the special grade, is 240s. per month. The minimum scale, payable to persons with 2 years training, is 80s. per month; for those who enter by special examination the salary grade is based on the results of the examination.

In West Africa positions of responsibility which have no parallel in British East Africa are held by Africans. It will be convenient to describe them separately. In Nigeria there were, in 1938, thirty-seven higher appointments, with maximum salaries of £400-£720, including fourteen medical officers, one police magistrate, four assistant secretaries, and three technical officers. In the Gold Coast, Africans with a university degree are eligible for posts on equal terms with Europeans. In 1938 there were forty-three African appointments, including a Puisne Judge and the Solicitor-General, the Assistant Secretary for Native Affairs, and eleven medical and ten technical officers. In Sierra Leone higher appointments numbered twenty in 1938, including the Senior Medical Officer and five others, one Assistant Treasurer, and one technical officer. In the Gambia two medical officers and one assistant are Africans.

In Nigeria an African clerical staff selected by examination and with fixed salary scales was established in 1921. In 1934 the examination system was abandoned, and provision was made for the appointment of candidates by selection at initial salaries varying with their educational qualifications from £30 a year up to £60 for graduates of the Higher College at Yaba. Salaries rise by increments to a maximum of £400.¹ The Gold Coast has an African civil service whose members are appointed by a board of selection. It comprises a senior branch, including posts of special responsibility which carry salaries up to £708.² Candidates must have a second-class teacher's certificate or have passed the London Matriculation or Cambridge School Certificate Examination. In Sierra Leone the African staff are admitted by means of an entrance examination, at a salary of £45, and on confirmation of their appointments receive salaries of £54 rising to £372 with efficiency bars at £90 and £200. Candidates who have a British university degree or have passed certain other examinations are admitted without examination.

¹ *Sessional Paper*, no. 19, 1935, p. 4.

² *Gold Coast Handbook*, 1937, p. 164.

(e) *The French Territories*

The French administrative service is divided into two separate corps, *administrateurs des colonies*, whose conditions of recruitment and terms of service are fixed by decree, and *agents des services civils*, organized by local *arrêté* in the various colonies. An *École Coloniale* for the training of the *administrateurs* was founded in 1889, and reorganized in 1927.¹ It is now entitled *École Nationale de la France d'Outremer*.

A single competitive examination is now held for admission to the Indo-Chinese and tropical African sections. Up to 1927 the entrance examination could only be taken after a two-years preliminary course at the *École* itself. In that year a non-specialist entrance examination was introduced and the period of training was lengthened from two to three years, in order to cover the subjects formerly taken in the qualifying course. Candidates who already have a university degree, the certificate of the *École Centrale*, or diplomas in mining, engineering, or agriculture, receive a bonus of one-sixth of the total marks gained in the examination. Candidates for the African services take courses in Moslem law and native languages as well as in colonial history and legislation and the more usual subjects.

The tropical African service is organized as a unit, including French West Africa, French Equatorial Africa, and Madagascar, and transfers may be made between any of these territories. The officers pass through a preliminary period of probation as *élèves-administrateurs*; after the probationary stage the service is graded into *administrateurs adjoints* of three classes, *administrateurs* of three classes, and *administrateurs en chef*.² Governors and Governors-General form a distinct class; though they are frequently selected from the administrative service; politicians are also sometimes nominated.³ Secretaries-general ceased to be a distinct class in 1913, and their duties are performed by *administrateurs* or other officials with special qualifications. There is no colour-bar in the administrative service; both in the higher administrative (including that of Lieutenant-Governor) and in

¹ Decree of Apr. 15, 1927.

² Decree of July 10, 1920.

³ P. Daresté, *Traité de droit colonial*, 1931, vol. i, p. 627.

technical posts (including heads of departments) coloured persons may be found. At the moment, however, these are for the most part natives of the West Indies who have qualified themselves in France for entry to the *École Coloniale* or employment in the technical services.

The initial salary of an *élève-administrateur* is 12,000 francs a year, to which a number of supplementary payments must be added. Each colony pays its own local bonus—*supplément colonial*; the rate is fixed by the local government and has varied as widely as from 70 to 120 per cent. of the basic salary. In addition there are an *indemnité de zone*, calculated partly in proportion to the cost of living in different parts of the same colony, partly as compensation for service in unhealthy localities; an *indemnité de départ*, paid on first appointment or on transfer to another colony, family allowances, and various other special payments.¹ The opinion was officially expressed in 1934 that the provisions for special payments were becoming excessive, and a decree was issued providing that all legislation authorizing such payments would cease to have effect unless submitted to the Minister for his approval before January 1, 1935.² The tour of service is two years, followed by six months' leave with full return passage for the official and his family; while on leave an *indemnité de séjour* in addition to the normal salary is paid to cover the extra cost of living in France.³ The law of April 14, 1924, establishes two classes for pension purposes, one retiring at 60 after 30 years' service and one at 55 after 25.

The desirability of a continuity of service which would enable administrative officials to acquire an intimate knowledge of the native peoples under their control is now generally recognized by the French administration, but such continuity has been found as difficult to secure in the French as in other African territories. In West Africa M. Carde, when Governor-General in 1924, introduced a system of *rouage* (designed to prevent corruption), whereby no administrative official should serve two consecutive tours of service in the same colony; but that system is now discredited, and an effort is made to bring officers back to the colony with which

¹ Ibid., pp. 678-81.

² Decree of Sept. 11, 1920.

³ Decree of Apr. 11, 1934.

they are acquainted. In Equatorial Africa frequent transfers add to the difficulties caused by shortage of staff and the slight extent of knowledge of native languages; French authorities have more than once acknowledged the mischief done by the 'instability of personnel'. In the Cameroons a much greater degree of continuity has been achieved.

In the *Secrétariat-Général* a compromise has been effected: here the *chefs* and *sous-chefs de bureau* compose a corps¹ (*cadre général*) available for service in any of the colonies (save Indo-China) and liable to transfer, whilst the clerks form a local organization (*cadre local*), are not transferable, and are amenable to regulations peculiar to each colony. Members of the *cadre général* are recruited from students of the *École Coloniale*, the home service, and sometimes from the *cadre local*: the salaries vary from 34,000 francs a year (*chef de bureau hors classe*) to 10,000 francs (*sous-chef de bureau stagiaire*). The *cadre local* is recruited as to one quarter among candidates under 30 possessing secondary school qualifications who have passed an examination uniform throughout the colonies; three-quarters of the posts are reserved for *ex-sous-officiers*.

The administrative and technical services are supplemented by a large number of European subordinates or *agents*, organized locally throughout the colonies by means of *arrêtés* of the Governor, and not subject to transfer. Thus, *agents des services civils* act as auxiliaries to the corps of *administrateurs*: they are divided into three grades—*commis*, *adjoints*, and *adjoints-principaux*²—but are always subordinate to the corresponding administrative officials. There is no examination for admission, but candidates must have passed their *baccalauréat* and those who have a university degree are placed in the *adjoint* class on appointment. They are employed both in the administrative and judicial services, and can qualify by a competitive examination for admission to the administrative grade, after a one year's course at the *École Coloniale*, but the standard is high and comparatively few avail themselves of this means of promotion. In case of shortage of administrative staff, however, they may be appointed to responsible administrative posts, and this has been done to a considerable extent in Equatorial

¹ Decree of Nov. 24, 1912.

² Decree of July 10, 1920.

Africa. It was announced in 1938 that in future the *agents* also would be selected after a qualifying examination.

The subordinate posts of many departments are similarly staffed by *agents*, who are largely found in primary schools, customs, railways, posts and telegraphs, public works, forestry, and harbours; the conditions of recruitment and service are laid down in innumerable *arrêtés* varying widely from one colony to another. Many of the *agents* are natives, and indeed the main purpose of the French system of native education is to train native personnel for service as *agents* in the administrative and technical departments; in the latter in particular much more use is made of natives with specialized training than in British or Belgian territories. The training, however, is not such as to qualify natives for responsible posts, and it does not appear to be the intention of the French administration that they should eventually occupy such posts.¹

The organization of French West Africa involves two characteristic features: a high degree of centralization in administrative activity, and the evolution of a system under which much of the work which in British territories would be discharged by the technical departments is entrusted to administrative officers with their staff of *agents*. It is, for instance, the administrative officer who is primarily responsible for the systematic increase of production under the *mise-en-valeur* policy;² some of the technical departments, such as those of agriculture or animal husbandry, tend to become exploratory and advisory rather than executive agencies. It has more than once been recognized that the general organization involves an undue concentration of authority. An *arrêté* reorganizing the central administration, introduced in 1923, suppressed a number of technical services which were duplicated in the separate colonies and created instead a smaller group of *Directions* and *Inspections*, the members of which, as their names imply, were to advise the Governor-General on broad lines of policy, but not to control the activity of the local technical services. There are four *Directions*—Cabinet (Civil and Military), Finance, Political and Administrative Affairs, and Economic Affairs, the last named including the *Inspection* of agriculture, veterinary and forestry services. There are also *Inspections* of public works, medical and

¹ See Chap. XVIII, p. 1267.

² See Chap. V, p. 141.

educational services. An Office of agricultural production and credit was added in 1929.¹ Research is centrally organized, and is frequently carried out by missions from the home departments concerned. As an example of central organization in the federation it may be mentioned that there is one geological research service for the whole of French West Africa, the local Mining Departments being concerned only with the enforcement of regulations.

In 1932 M. Brévié, then Governor-General, again urged the importance of decentralization. As he interpreted the function of the central government, it should outline policy, but should not suppress local initiative by frequent intervention in matters of detail. The burden of correspondence should be lightened by confining the reports asked for to matters of major importance; officers of the technical services should be responsible to the local administrative officials (*commandants de cercle*) and should not have to refer proposals for action to the heads of their departments at the colonial capital. The time gained by the reduction in office work should be spent in maintaining contact with the natives. Local initiative should be developed by the requirement of a programme of development work for the year to be submitted by each *cercle* for the Lieutenant-Governor's approval.² The five years of M. Brévié's term as Governor-General, however, were not sufficient to provide evidence of any considerable reaction against the tradition of centralization.

In Equatorial Africa the reorganization of 1934,³ which divided the territory into twenty large departments, was intended to assist in producing a decentralization of administrative control. While, however, in the Cameroons the *Chefs de Région*⁴ effectively control the work of the technical officials stationed in their areas, control from head-quarters appears to be still maintained in Equatorial Africa. The Governor-General appointed in 1936, M. Reste, proposed as a means of decentralization the separation of the budgetary allocations for the four *régions* (the former colonies of the federation);⁵ it should be noted, however, that this still

¹ *Arrêté* of Dec. 26, 1929.

² J. Brévié, *La politique et l'administration indigènes*, 1932, pp. 13-27.

³ See above, p. 191.

⁴ See above, p. 192.

⁵ Address to the Conseil de Gouvernement, *L'Afrique française*, Mar. 1937, p. 192.

leaves the departments dependent on the governors of the *régions*. M. Reste also reorganized the central services by creating agricultural, veterinary, and forestry services to advise the local authorities, and two inspection services, one responsible for general administrative policy, the other for labour conditions.¹

In this colony, with its territory four times the size of France and its slender resources, the maintenance of an adequate staff has presented unusual difficulties. In 1908 the civilian administrative staff numbered only 107; this was increased to 495 by 1914; in 1926, 363 administrative posts were provided for in the estimates, but it was only possible, owing to the lower rate of local bonus offered in this colony, to fill 112 of these. Of the technical services the registration, customs, and medical departments were at that time stated to be seriously understaffed, while no veterinary officers had been appointed.² In 1927, however, a local supplement equal to the basic salary was offered.³ In 1928, 250 administrative posts were filled out of a total of 366 provided for. The educational staff had only 16 members for 29 posts, the agricultural 7 against a total required of 15, the public works department 140 out of a total of 158 posts offered, and the postal service 61 for 78 posts.⁴ The bonus for colonial service was later increased to 120 per cent., but reduced once more to 100 per cent. as a measure of economy in 1933; at the same time all salaries were reduced by 10 per cent., and personnel was reduced to the numbers regarded as an indispensable minimum—206 administrative officials, 211 officials of the *services civils*, with 175 technical officers including a health service numbering 69. The policy of filling as many subordinate posts as possible by suitably trained natives was announced in this year.⁵ In the meantime it has been the usual practice to fill posts for which candidates with the statutory qualifications are not forthcoming by members of the subordinate local service (*service civil*). In the Chad region three of the four departments and fifteen of the twenty-four subdivisions are at present administered by military officers.

¹ *Arrêts* of May 15 and July 24, 1936.

² Governor-General's Address to the Conseil de Gouvernement, *Renseignements coloniaux* (Supplement to *L'Afrique française*), Jan. 1927, p. 39.

³ Governor-General's Address, *Renseignements coloniaux*, Feb. 1928, p. 105.

⁴ *Ibid.*, Jan. 1929, p. 106.

⁵ *Ibid.*, Mar. 1934, p. 66.

(f) *The Belgian System*

Both the administrative and technical services in the Belgian Congo are divided into grades known as *fonctionnaires* and *agents*; these grades again are subdivided. Appointments are made to an initial rank depending upon the educational qualifications of the candidate. Only second-class *agents* are appointed without a university degree. A course of training designed as a preparation for the service is given by the faculty of political science of the *Université Coloniale* at Antwerp, which also comprises a commercial section. The administrative course has the characteristics of a general rather than a technical education. The latter is represented by the shorter courses at the *École Coloniale*. The university course extends over four years; the period of military service is spent between the second and third years. A competitive examination is held at the end of the first year, after which only the number of students for which there are vacancies in the colonial service are allowed to continue with the administrative course.

Persons appointed to the service without having studied at the *Université Coloniale* are obliged to take a shorter course at the *École Coloniale* at Brussels, the programmes of which are fixed by regulation of the Minister for Colonies. The courses are organized in a higher and a lower section, the latter being designed for persons without university training who enter the service at the lowest rank; these persons can qualify for entry to the *fonctionnaire* class by taking the higher course after ten years' service.

The conditions of service in the Congo are regulated by a series of decrees which came into force in 1935.¹ The tour of service is three years, at the end of which six months' leave is due. Both *fonctionnaires* and *agents* are on probation for their first tour. The full term of service was increased in 1934 from eighteen to twenty-three years, including the probationary tour but exclusive of leave periods. Officers with twelve years completed service might retire or be asked to retire, in which case they would be entitled to pension. This period was increased to fifteen years in 1934.

Under the *arrêté* of 1934 *fonctionnaires* were graded in two main classes—*administrateurs* and *commissaires*—and *agents* into three

¹ *Arrêté royal*, Sept. 24, 1934; *arrêté ministériel*, Nov. 10, 1934.

grades—principal, first, and second class. The initial salaries for the three grades of *agents* are 40,000, 45,000, and 50,000 francs a year. In the *administrateur* class initial salaries rise from 40,000 francs for fourth-class *adjoints* to 150,000 for provincial commissioners. In each grade an increment of 5 per cent. on the basic salary is due at the end of every two years for eight years, followed by three further increments at a variable slightly higher rate at the end of each subsequent three years. These periods include time spent on leave. Family and travelling allowances are paid.

Appointments to the *fonctionnaire* class are made by royal *arrêté*, to the *agent* class by ministerial *arrêté*; the Governor-General is also authorized to appoint *agents*. The posting of officials is left to the Governor-General, and does not necessarily take into account the language which they have taken in their training course. Continuity of service is, however, maintained as far as possible; transfers are seldom made from one province to another, and it is the accepted policy that officers should return to the same district after leave. But there is the same difficulty as elsewhere in preventing frequent changes of staff, and there are cases in which changes have occurred on the average once every two years. The provision that an *administrateur-adjoint* may act for the *administrateur territorial* in the latter's absence helps to secure continuity by making it unnecessary to replace every *administrateur* who goes on leave. There are certain disadvantages, however, in the extension of the principle of continuity to the secretariat. No transfers are made between the secretariat and the districts, even in the special departments of native affairs and labour.

The Congo is divided into 6 provinces, 16 districts, and 104 *territoires*. The mandated territory of Ruanda-Urundi is divided into 2 residencies and 15 *territoires*. The province is administered by a *commissaire de province*, who has local technical services attached to him; he is obliged to visit every district in his province at least once a year.¹ Although the district is a territorial unit, the functions of the *commissaire de district* since the reorganization of 1933 have been developed in the direction of inspection rather than administration. He is obliged to make a detailed inspection of every *territoire* in his district at least twice a year, and to report

¹ *Arrêté royal*, June 29, 1933; *Codes et lois*, op. cit., p. 1967.

on the functioning of the various services; his observations are attached to the reports submitted to head-quarters by the *administrateurs*. The latter are required by the *arrêté* effecting the reorganization to keep in constant touch with native authorities and to guide the development of native institutions. They are obliged to spend 20 days in each month in touring their territories, a provision which sets an automatic limit to the amount of desk-work that can be required of them.

The number of *agents* in each territory is roughly proportionate to the native population, the standard aimed at being one *agent* for every 10,000 taxpayers. They are responsible for the census work to which the Belgian Government attaches much importance,¹ and for various activities for which elsewhere technical departments would be responsible, such as the construction of local public works and the supervision of the programmes of compulsory cultivation.² In British colonies which have adopted the system of indirect rule,³ native authorities are as far as possible made responsible for local activities of this nature, but it seems probable that so long as the Congo authorities can rely on this efficient and inexpensive European service there will be some hesitation in entrusting powers of this description to the chiefs.

In 1936 there were in the Congo, in addition to the Governor-General and the 6 Provincial Commissioners, 23 district commissioners, 287 administrators, and 412 agents; the administrative staff of Ruanda-Urundi consisted of the 2 Residents, 22 administrators, and 25 agents. Provision was made in 1921⁴ for the creation of a native civil service appointed by the Governor-General. This includes teachers, postal clerks, assistants in the customs and medical departments, and public works foremen; in the administration natives are employed only as clerks.

The head-quarters departments in the Congo are the general secretariat, with special sections on native affairs and labour, education, militia, health, finance and customs, budget and audit, public works, economic affairs, agriculture and forestry, posts and telegraphs. In principle, the local branches of these services are

¹ See Chap. IV, p. 120.

² See Chap. IX, pp. 491 and 526.

³ See Chap. IX, pp. 413-16.

⁴ *Ordonnance* of Feb. 28, 1921; *Codes et lois*, op. cit., p. 278.

responsible to the Provincial Commissioners, who are thus in a position to co-ordinate their work; an exception, however, is made in the case of the medical service, which is centrally controlled.¹

The present system of recruitment is providing the Congo with a very different class of officer, both in the *fonctionnaire* and *agent* class, from that employed in the days of the Congo Free State. There is considerable competition for entry into both classes; the process of building up a service tradition is aided by the training given in the *Université* and *École Coloniale*. The organization adopted appears to give to the *commissaire de province* and *commissaire de district* adequate powers to co-ordinate the work of different agencies of government within the areas under their charge; there is a refreshing absence of office work and a corresponding gain in the amount of touring.

(g) *The Portuguese Colonies*

In Angola and Moçambique there are central, provincial, and local services.² The central services are native affairs, education, public health, agriculture, and veterinary. Angola has a special service of public works, industries, and mines; Moçambique a special service of railways and harbours.³

The provincial services are divided into departments for civil administration and native affairs, the latter being responsible for questions concerning labour, native emigration, native courts, and native welfare in general. Administrative officials are graded as district intendants, administrators of circumscriptions (of three classes), station officers, and aspirants. Secretaries of circumscriptions, who are primarily engaged in office work but are also responsible for census-taking and tax collection, form an intermediate grade between the station officer and the administrator. The service is open to persons trained at the Higher Colonial School at Lisbon, who enter with the grade of station officer, and to persons not so trained who enter as aspirants. In each case

¹ M. Halewyck de Huesch in *Organisation politique et administrative des colonies*, Institut Colonial International, 1936, p. 33. See also Chap. XVII, pp. 1178 ff.

² Decree-law of Nov. 15, 1933.

³ J. de Penha Garcia in *Organisation politique et administrative des colonies*, 1936, pp. 266-7.

their appointment is not confirmed until after a probationary period of five years; a provisional confirmation is necessary at the end of the first two years. Appointments of persons entering at the grade of station officer are made annually on the basis of their attainments at the Higher Colonial School, but without a separate examination; where possible, appointments in each colony are given in preference to persons who were born there or have relations there. Aspirants are required to be Portuguese citizens (which includes persons of mixed blood), and to have had five years' secondary education.

All vacant posts are filled alternately from members of the aspirant class and the graduates of the Higher School. For the latter the only statutory condition of promotion is length of service; they may be appointed secretaries of circumscriptions at the end of the first year of their probationary service, promoted to third-class administrator after two years from the confirmation of their appointment, to first and second class after further periods of two years, and to Intendant after six years as administrators. For aspirants, however, it is necessary to pass an examination for admission to each grade up to that of third-class administrator. Salaries range from 17,000 escudos a year for station officers to 60,000 escudos a year for Intendants.¹

XI. CONCLUSIONS

There can be no one accepted standard for measuring the merits of different forms of colonial government. Negative tests can, it is true, be applied; the failure, for example, to provide the normal safeguards for securing that measure of public order which is the essential basis of all social progress. But the attempt to apply any positive test at once invites a reference to the object which policy sets out to attain, for though historic accident may in some measure influence the shape which a government assumes, the form taken by its major institutions and by its scheme of social services is in the end determined by its accepted conception of colonial policy. There can be no better illustration of this fact than that presented by the governmental system of the Union and Southern Rhodesia. In both countries the prevailing policy is the

¹ Decree of May 31, 1934.

logical outcome of the determination of a dominant white population to adopt for itself, on the political side, the type of responsible self-government which is traditional with both the British and Dutch peoples, and, on the social side, to organize all its institutions with the primary object of maintaining the standards of white civilization. This policy has in the Union produced the series of social, economic, and political institutions which implement the principle of racial segregation,¹ and it is clear that for many years to come, and at all events so long as economic conditions permit the Union to maintain its present scheme of social organization, the major problems of administration will be viewed as conditioned by this conception. In regard to the British Crown Colonies, the accepted policy may be said to have for its objective the creation of institutions designed to assist each unit to achieve the highest social and material advancement which its own peculiar circumstances permit. It is implicit in this policy, that the character of the political or cultural institutions to be adopted must be related to the capacity of each unit for development rather than to any preconceived theory of the value of the institutions of European civilization; it follows again that on the material side, while every effort should be made to increase the contribution which each unit can make to the commercial or military resources of the Empire, this object cannot be allowed to override the primary considerations previously mentioned. But these views constitute a philosophy rather than a policy; their acceptance would not predicate the adoption of any particular type of government; and it is of more immediate importance to discuss the concrete form in which the British colonial philosophy has in practice expressed itself. In the first place, in dealing with the relations between the motherland and the government of the colony, its practice has been to allow as wide a field as possible for local initiative both in legislative and executive activity. It is not to be doubted that it has thus secured the full value of the personality and sense of responsibility of its officials, a benefit which may be held to outweigh the fact that the results achieved are unequal, and that the systems followed in different units present a diversity which must be a source of some bewilderment to foreign observers. For the same reason, ad-

¹ See Chap. V, pp. 130-2; Chap. XI, pp. 664-71; and above, pp. 145-55, and 176.

ministration within the unit is as far as possible decentralized. It is a system under which the British character seems to work at its best, though the foreign critic, traditionally in favour of logically devised and centrally directed policies, is apt to find that in British areas the various administrative and social activities of government, as for example the organization of justice, the regulation of land tenures, the selection of educational or agricultural systems, often fail to follow a co-ordinated scheme of policy. It is not necessary to summarize here the full description given elsewhere of the policy of native administration now prevailing in the British colonies; it is a characteristic effort to devolve authority, over as wide a field as possible, on local self-governing institutions of a typically native form.¹ But the most characteristic outcome of British colonial philosophy is to be seen in the adoption of the legislative council as a standard feature in the organization of the Crown Colonies and Protectorates. It has a double function, as the source of law, and as the chief organ for the expression of public opinion. It will have been seen that use is seldom made of the power of Parliament to legislate directly for the colonies, or of the Crown to create law by the issue of Orders in Council, and the legislative council is now almost the only source of law in the territory. But it is not enough here to accept the legislative council as the outcome of a well-established British tradition. It is necessary to inquire how far it serves the purposes for which it is designed; and further, what is likely to be its future part in the political development of the territory.

It is necessary in the first place to emphasize the true character of the councils as they now exist. In the constitutional sense they remain agencies of an executive government which is itself responsible to the Secretary of State; the executive does not limit itself to the power of veto; it secures its own power to legislate by the maintenance of an official majority.² Compared with the French and Belgian method of legislating by ministerial decree,³ the British system not only has the advantage of ensuring some measure of public discussion on legislative projects, but it provides means for adapting the law to local circumstances; it is perhaps a more

¹ Chap. IX, pp. 413 ff.

³ See above, pp. 185 ff., and pp. 206 ff.

² See above, pp. 162 ff.

satisfactory provision for the latter purpose than the local *arrêté* widely used in the French system. Publicity is not, moreover, confined to legislative projects, but by use of the privilege of interrogation has been extended to the field of executive action. On the other hand, it is an important fact that the councils, as is indeed inevitable in the present conditions of Africa, are not in the normal sense representative; the elective system is confined to Europeans, or in the West Coast to certain sections of Africans; nowhere does representation bear relation to the numerical strength of the different communities. This does not of course involve that African interests go without expression, but in East Africa the extent of the expression given to them is dependent on officials or on non-official Europeans specially interested in native affairs; in West Africa, though African views may receive direct expression, they are voiced mainly by a section with particular interests of its own. In these circumstances, the influence which a council has been able to exert on the course of legislation or of administration, including the expenditure of public moneys, has varied widely in different areas. While there are some areas in which non-official members of the Council have exercised little influence on official decisions, there are others, of which Kenya and the Gold Coast may be taken as examples, where this is far from being the case. The European representatives in Kenya have had an unusual position, for they have more than once been able, when in controversy with the Kenya government, to avail themselves of the support which their connexions have enabled them to secure in English political circles, and, as has been shown,¹ to resist measures which the Secretary of State would have liked to enforce. The European community has on several occasions been able to secure abandonment of projects of taxation put forward by government in the general interests of the colony,² and has been able to direct the course of tariff and land legislation for the benefit of European farmers.³ The Gold Coast affords an example of a somewhat different type. Its history records many cases in which projects of law, some of which were designed to protect the general population against the chiefs, have been abandoned as the result of the opposition of the chiefs' party

¹ See above, p. 165.

² Ibid.; see also Chap. X, pp. 550-1.

³ See Chap. IX, p. 383, and Chap. XII, pp. 742 ff.

in the legislature; some of these have owed their subsequent enactment to the issue of an Order in Council by the Crown. Here also the circumstances were unusual, in that the native policy of the Gold Coast Government was for long marked by a tradition of hesitation and indecision.

The councils in the African colonies and protectorates have halted at a somewhat early stage in the traditional development of the council system. The next stage is normally one in which the council is given an unofficial majority, obtained either by election or by election combined with nomination; here the executive, though retaining the power of veto either directly or by process of 'Reservation of Bills to the Crown', can only secure its own legislation or its budgetary proposals by certain constitutional devices, such as that by which a prescribed number of subjects are reserved for control by executive regulation in place of legislative statute, or that by which the executive is given the power of 'certification' of legislative projects (which then have the force of law in spite of an adverse vote in the legislature) or of 'restoring' demands for supply refused by the legislature. The acceptance of conventions under which special powers of this kind are progressively held in abeyance, until they are ultimately withdrawn from the law of the constitution, marks the course by which a dependency progresses towards responsible self-government. The essence of this constitutional position is the responsibility of the executive to its own legislature; but this may still be accompanied by certain restrictions on the full competence of the legislature; an example of this has been seen in Africa in the reservation of native affairs from the competence of the Southern Rhodesian Chamber,¹ and a similar provision was discussed by the Closer Union Commission as one of the possible conditions on which responsible self-government might be extended to Kenya.²

In discussing the question whether the colonial and protectorate councils are likely to halt permanently at the present stage, or to develop on the lines followed elsewhere, we met with the fact that the political future of the African colonies has never been made the subject of systematic consideration in Great Britain; certainly there is nothing comparable to the deliberations which preceded

¹ See above, pp. 157-8.

² *Report*, op. cit., Cmd. 3234, 1929, pp. 106, 155-6.

the different stages of constitutional change in India. Neither the Covenant of the League nor the Mandates explicitly envisage any one particular form of government as the goal of mandatory rule. Such consideration as has been given to the question by the British government has centred mainly on the problems arising from the existence of British communities in the East African territories. The Secretary of State in 1922 stated that he could not contemplate anything which would prevent Kenya from looking forward 'in the full fruition of time' to responsible self-government';¹ but however encouraging this aspiration was to settlers, it was hardly a considered statement of policy. On the other hand, the White Paper of 1923, which had more of this character, was impressed with the paramount need for safeguarding native interests and regarded the grant of responsible self-government as 'out of the question within any period of time which need now be taken into consideration', and, for the same reason, the government declined to contemplate the possibility of substituting an unofficial for an official majority in the council. The White Paper of 1930 stated that dominion status was the ultimate goal of Kenya, but could not be attained until the native community could participate in self-governing institutions. Useful as was the comprehensive study of political issues in East Africa which was made by the Commission on Closer Union of 1927, neither their report nor the recommendations made on it by the Joint Parliamentary Committee can be said to have done more than reinforce the arguments for maintaining the existing position. The case was in particular strengthened against the concession of an unofficial majority in the legislature. It will be agreed that to create an unofficial majority, while at the same time subjecting its decisions to the overriding control of an official executive, tends to deprive the legislature of much of its value as an organ of public opinion; it is driven by a sense of impotence into an attitude of political irresponsibility; it may be said indeed that the concession of an unofficial majority is only justifiable as marking a temporary stage of which the acknowledged end is responsible self-government.

On the evidence of the constitutional documents available, re-

¹ *The Times*, Jan. 28, 1922.

sponsible self-government would seem to have been tacitly accepted as an ideal, but one which is removed from the field of practical politics owing to the existence of a conflict of interests between the European and the native (or immigrant non-European) populations. But this decision is based on grounds of expediency rather than of logic; in the light of the grant of responsible self-government to Southern Rhodesia it invites the question, what precise ratio of European to native population can be held to justify the concession of responsibility; and the answer given to Kenya would not in any case hold good for other territories, such as some of those in West Africa, where the same conflict between European and native sections of the population cannot be said to exist. If strict logic is applicable in such circumstances, it must be assumed that it is the intention to concede responsible self-government in West Africa when Africans are considered competent to exercise it. They would in that case benefit by the absence, just as East Africa would lose by the presence, of a European community which has brought with it all the traditions of responsible government.

It is not in the British tradition to explore far-reaching constitutional issues until the force of circumstances makes it essential to do so; and it is not reasonable to expect that any government would now enter on an explicit commitment regarding the future status of the African colonies. But there is one reason at least why some further consideration should be given to the question whether a responsible government based on representative institutions is to be held to be the most suitable constitution for the African colonies. It is increasingly clear that Africans must before long be given a material addition to their very limited representation in the legislative councils. There is not in the African Crown Colonies any body similar to the newly constituted Native Council in the Union, which, though it may have only a consultative status, can nevertheless claim to be widely representative.¹ The French administrations have on the whole been more liberal in their provision of advisory bodies than the British. If, however, native representation in the legislative councils is progressively increased, this will stimulate a hope, if it does not convey a promise, that parliamentary

¹ See above, pp. 153-5.

institutions will be allowed to pursue their normal evolution in the African colonies; all experience shows the difficulty of calling a halt when political representation has once become a serious matter of interest. But in the meanwhile Great Britain, in fostering the system of indirect rule, is promoting a widespread agency of local self-government for which a place will eventually have to be found in the political organization of the colonies. As is said elsewhere, there is much that is difficult to foresee in the future of indirect rule;¹ but possibly the most difficult problem of all, is to envisage the feasibility of integrating the system with the normal type of Parliamentary institutions.

It is at this stage difficult to discuss the Belgian outlook on the political future of the Congo, for the development so far attained is not such as to permit of the formulation of a definite policy. As has been seen, decisions have still to be made even on such points as the inclusion of Africans in advisory councils and the like.² On the other hand, French policy is sufficiently clearly defined. Attention has already been drawn to a fact which explains much of the difference between the French and British outlook on the future of their colonies; the French attach to legal and social status the importance which the British give to political rights and freedom in commercial relations. The greatest boon which the British can hold out to a subject people is self-government; the best that the French can envisage for them is admission, in such measure as conditions permit, to the social and cultural institutions of French civilization. All the social activities of the administration are co-ordinated with a logical precision to that end; and it is fully in keeping with that position that the colony should be held liable to contribute to the military resources of France and, when no treaty or other obligations forbid, should be brought within her commercial economy. At the moment there seems no tendency to extend to African *sujets* the privilege of election to the French Chamber, which is now only enjoyed by the *citoyens indigènes français*, a relatively small body whose growth by the process of naturalization is rigidly controlled.³ Save for the existence of this feature in the constitution, a French colonial government may be viewed as a

¹ See Chap. IX, pp. 527 ff.

² See above, pp. 211-12.

³ See above, pp. 195-200.

bureaucracy, dependent on ministerial decree for most of its legislation, admitting coloured *citoyens* to its colonial service and to the rank of officer in the army, and making a wide use of African *sujets* in subordinate employment, but in other respects confining Africans to the membership of advisory bodies. The conception is logical; it does not have to confess, like the British, that circumstances may render it impossible to make further progress in the development of the political system on which its subjects believe it to have embarked. At the moment, French policy seems successful in achieving its more immediate purposes, and its execution is attended with few signs of political discontent. This may, as some critics have suggested, be due partly to the fact that the attitude of the administration on the subject of the press or of public meetings is admittedly less tolerant than in the British territories; it is clearly due also to the care taken to retain the interest of the *élite* and to the fact that the French attitude is less provocative than some others of a sense of social inferiority on the part of the subject race. Nevertheless it cannot be doubted that the French will have to face sooner or later the problem which is the natural outcome of circumstances such as they are creating. With the general growth of education and standards of life, it would be strange if there did not arise among their African subjects a demand for a greater share in the government of their own affairs; and the embarrassment which this will present to France will be increased in proportion to the success which has been achieved in making Africans identify themselves with French civilization. The flexible nature of the British colonial system can possibly accommodate itself to such a demand with less shock than the French system, which is at once more centralized and more rigidly attached to a framework of European institutions.

In the course of the preceding sections of this chapter reference has been made to a number of problems of administration common to the colonizing powers. The degree of initiative enjoyed by the colonial governments,¹ the discretion left by them to their own subordinates,² the method of co-ordinating the work of the general administration with that of its ancillary departments are

¹ See above, pp. 160-3, 185-9, 206-13, and 213-16.

² See above, pp. 163-73, 210-13, and 215-16.

matters which inevitably vary with the type of governmental system in force;¹ the difficulty of securing continuity of local experience among administrative officers is a common problem for which no solution has yet been found. In their recruitment of a colonial administrative service France and Belgium suffered at an earlier stage from the fact that they had not the traditions which attached in Great Britain to service in the dependencies. The type of recruitment is, however, now greatly improved. Both France and Belgium attach greater importance than Great Britain to a specialized training in preparation for service in the colonies, partly for its own sake, and partly because the longer course affords an opportunity to eliminate those who appear unfit for the class of duties they will have to perform. In following its present system, Great Britain possibly secures a wider field of choice, but does so at some loss to the technical efficiency of the recruits to its services.

It remains to notice in more detail a problem of first importance to all three powers, namely, the employment of Africans in the public services. Different considerations apply to employment in the subordinate and in the superior services; the issues which employment in the latter raises are not only administrative but political. It has been considered advisable to give at some length the facts about subordinate employment,² including in that term not only African, but European employees, such as the *agents* of various classes in the French service. It has been justly observed that failure to provide an administrative officer with an adequate subordinate staff not only interferes with his position in the matter of general direction of the administrative activities of his province or district, but also prejudices his influence over the native authorities and makes proper contact with the native people difficult.³ As compared with other administrations, circumstances in the British territories appear to have combined to give the district officer an unusual amount of clerical or routine work, while the subordinate staff supplied to him is markedly inadequate. In the chapter dealing with taxation it will be seen that work in connexion with the collection of tax has in many areas interfered with

¹ See above, pp. 227 ff., 239 ff., and 243 ff.

² See above, pp. 233-5.

³ See Chap. X, p. 559; *Report on the Financial and Economic Position of Basutoland*, Cmd. 4907, 1935, pp. 75-83.

more important duties.¹ In urban or industrial areas, and where a considerable European population exists, time has been occupied with judicial and routine work which has prevented proper contact with the native people.² The explanation perhaps lies in the fact that the British have had an instinctive mistrust of the use of subordinates recruited in Europe, while African subordinates of the requisite quality and number have not yet been available. In British colonies Europeans appear to be employed to any extent in connexion with the administrative staff only in cases where legal work or the presence of a European population necessitates the employment of magistrates' clerks or licensing officers; in Tanganyika, for example, 7 clerks only are employed with an administrative staff of 185, in Northern Rhodesia 36 clerks with an administrative staff of 109, the collection of taxes and the routine work in native areas being left in the hands of junior district officers or cadets. Both the French and Belgians have made a wide use of European subordinates; but in comparing the figures of subordinate European personnel given in Table III included in this chapter with those already given for the Belgian Congo intermediate service, it must be remembered that both the latter service and the corresponding *service civil* in the French territories is recruited in the home countries and is used extensively in the district administrations for work such as the supervision of native chiefs, which in any case would be considered the function of the district officer in British territories. The *agent territorial* in the Congo, and the French equivalent, has to some extent an opportunity of entering the superior administrative cadre, and in French territories, especially in French Equatorial Africa, owing to difficulties in recruiting the *administrateur* class, he often functions as the sole superior government agent in an administrative area. The need of qualified administrative assistance is, of course, specially felt in systems of direct administration, and there is ample evidence of the value attached to the work of the European subordinate staff in both the French and Belgian territories. In the French areas its work has been most conspicuous in the ancillary services;

¹ See Chap., X, p. 601.

² *Report of the Commission to Inquire into the Disturbances in the Copperbelt*, Cmd. 5009, 1935, pp. 40-1.

in the Congo it has also taken an important part in administrative work, and in particular in census and tax proceedings. But there are obvious limits to the use of a European subordinate staff in African conditions. To employ the comparatively cheap agency of the *sous-officier* class involves, as experience has shown, a grave danger of lowering the standards of conduct; the higher class now being recruited, though less costly than the *administrateur* cadre, is still by no means inexpensive. There are certain difficulties which are bound to arise from the employment in colonial conditions of a subordinate service recruited from a social class not markedly differing from that of the administrative service. In the French service there is said to be some discontent regarding pay and promotion to the administrative class, and it is significant that there is a growing opinion in favour of the employment of Africans for clerical work. It is at all events clear, that the growth of a European intermediate service should not be allowed to interfere with the greater need of the development of an African service which will in time assume the burden of the routine work of the administration.

In regard to the employment of Africans experience shows that it is in what has been described as the 'intermediate' rather than in the purely subordinate cadres that the most pressing problems arise. It is to the existence of the former class, with an adequate technical training, and with the standards of conduct necessary for the exercise of responsibility, that administrations must in the future look for the means of expanding the operations of their ancillary services. The chapter on education shows in some detail the efforts being made by the French to train this class in their institutions at Dakar and elsewhere.¹ In the British territories the institutions at Fort Hare, Makerere, and Yaba are designed for the training of this class; Achimota may be said, in part at least, to serve the same end.² There does not seem, however, to be any evidence of a common policy among the British administrations in regard to the use of an 'intermediate' cadre of Africans. The recent Makerere Commission found governments uncertain as to their requirements for trained Africans for employment, and none of the East African governments consulted appeared to

¹ See Chap. XVIII, p. 1267.

² Ibid., pp. 1248 ff.

contemplate the use of any considerable number of Africans from secondary or higher schools in connexion with the administrative services during the next ten years. The greatest demand is 120 secondary-school and 328 higher-college trained Africans for medical work, and 500 secondary-school and 249 higher-college pupils for educational work, and out of a total of 2,066, only 8 are required in connexion with the administrative service.¹ These estimates are admittedly conservative and reflect the doubts of administrations that the educational system will be able to supply any considerable demand in the near future. The problem is largely educational; the provision of secondary education is not yet adequate to create the educated class from which the technical services must be recruited. But, apart from lack of provision for technical training, the matter is also complicated by the reluctance of departments to use agents of whose efficiency they are not yet confident. A longer view would realize that if a satisfactory service of this class ultimately emerges, preliminary failures are of relatively small account.

As the figures quoted above indicate, hesitation is most pronounced in regard to the employment of Africans in the administrative service, save as clerks or in some other subordinate capacity. The 'intermediate' class of employee would here normally take the position of assistant to the District Officer, with lower judicial powers, but a definite, if subordinate, field of executive responsibility. There exist a few instances in which Africans of this class have been employed in the administrative branch, though generally in secretarial and similar employ rather than in district administration. It is often contended that the system of indirect rule both reduces the field for the employment of this class, and creates the special difficulty that tribal authorities would resent the intrusion of Africans belonging to other tribes. The attitude towards this class perhaps owes something also to the influence of the preference for the uneducated over the educated native which is so much more conspicuous in British than in French territories. The problem is far from simple; but those who are aware of the great debt owed by India to its 'provincial' services, will hope that the British administrations in Africa may be able to find a way to make an

¹ *Higher Education in East Africa*, Colonial 142, 1937, p. 23.

equally beneficial use of educated Africans. There appears already to be an opening for this class in dealing with the mixed communities and the natives living in non-tribal conditions who are dealt with in Chapter IX.¹

There remains the question of the employment of Africans in the higher ranks of service. It has been previously remarked that the considerations involved here are of a political rather than an administrative nature. The theory of 'association' has made it relatively easy for the French to contemplate the admission of coloured *citoyens* to their higher administrative service; though the officers of this type now serving in West Africa come mainly from the West Indies, it is to be presumed that a resident of West Africa with the necessary citizen status and educational qualifications would be equally eligible. Educational and other conditions in the Congo are not yet such as to make the matter one of practical interest there. British policy, while acknowledging in principle the value of associating Africans with the machinery of government, has up to the present preferred to seek a solution in their association with the legislature. Many thinkers have also contended that the institutions created under indirect rule, rather than the ranks of the administrative service, provide the true field for higher service by Africans. Here, however, the field must necessarily be limited by the fact that many of the tribal authorities would not welcome the services of Africans not belonging to their own tribe. A few appointments have been made to administrative posts, such as the well-known instance of Mr. Henry Carr, who was about 1919 made Resident of the Colony of Lagos; and Africans have been appointed to judicial posts in the Gold Coast, as well as to the superior establishment in certain of the technical departments.² It would seem, indeed, that the liberal support given by the Gold Coast to Achimota has been due to a belief that the attainment of sufficient academic qualifications would ensure an appointment in the superior services of the Gold Coast government.³ The government itself does not appear, when making the appointments mentioned, to have done so in pursuance of any principle, such for instance as the reservation of a defined

¹ See pp. 496-527.

² See Chap. XVIII, p. 1249.

³ See above, p. 235.

proportion of its higher posts for suitably qualified Africans. It is not perhaps advisable that the pressure from educated Africans in the western coastal areas should be allowed to force a declaration of policy applicable throughout the African colonies; but the position on the West Coast needs to be clarified, and the question of the policy to be followed in the colonial areas generally will before long demand an authoritative decision.

CHAPTER VII

LAW AND JUSTICE

I. THE INTRODUCTION OF A SYSTEM OF LAW

THE introduction into Africa of a system of law, based in the main on European concepts, has brought to light difficulties of adjustment which have rightly engaged the study of the social psychologist; but it has at the same time presented problems in comparative jurisprudence which have received less attention from students in that field. Yet the problems are not new; they have occurred whenever conquering or colonizing nations have faced the need for regulating the legal relations of mixed populations, or for integrating into a legal system the customary law of more primitive peoples. In the history of the diffusion of law in the Roman Empire and in British India there is much that is suggestive to the student of the evolution of law in Africa.¹

At the outset, Rome attempted to confine the operation of her legal system to those who had in her provinces the status of citizens; the 'subjects' were left to the operation of their own courts where such existed, as in Sicily or Greece, or to regulation by tribal custom in more backward areas. Gradually, however, Rome had to face the action of the forces she was bringing into play. In the more civilized areas there was a large growth in the numbers admitted to citizenship, and an increasing tendency for the administration to pervade the whole public life of the province; in the more backward, some remedy had to be found for the repugnance between tribal observances and civilized concepts. In the metropolis the law had, from about the third century B.C., been gradually modified by praetorian edicts to meet the needs of an expanding society; in the provinces the governor began to regulate by his own edict the law in mixed cases between citizens and aliens, and to issue orders regarding the procedure of criminal law in the alien courts. During the three formative centuries, 150 B.C. to A.D. 150, the metropolitan law gradually expanded until it became more suitable to the needs of the Empire at large;

¹ J. Bryce, *The Roman and the British Empires*, 1914, Essay II.

the provincial law, by a process of absorption, began to draw nearer to that of the metropolis. The law of property and contract, the penal laws and the system of legal procedure were practically identical; but family relations and inheritance were still regulated by the customary law. In the third century A.D. the legal distinction between citizens and aliens vanished with the grant of full citizenship to all subjects of the Empire. The effect was not at first to supersede the customary law peculiar to certain provinces. Even when imperial legislation took a new and vigorous form, under the unifying and pervasive influence of Christianity, and codification had been completed in the reign of Justinian, local variations persisted.

The evolution of a system of law in British India moved in another direction, determined as much by diversity of environment as by difference of objective. The British had no large class of their own citizens to consider; on the other hand, they encountered a civilization which was shared by a greater mass of people and was more tenacious of its custom than any with which the Romans had to reckon. To the English in the days of Clive and Warren Hastings, India appeared to be already regulated by Hindu and Moslem law, which they viewed as developed systems. In effect, however, the law in use consisted of mixed elements. There was an elaborate procedure of inheritance and family law, the Moslem uniform, the Hindu much diversified, but both based on writings and text-books having religious authority; there was a body of readily ascertained custom relating to land; and finally, there were certain penal rules drawn from Moslem law and generally enforced throughout what then remained of the Mogul Empire. To these conditions it was impossible to apply the English common law of the day, and the early administrators carried on what they found, applying English law to the English and Indian law to the Indians. Gradually, however, it was found necessary to regularize the law of procedure and the law of crimes; in particular, the penal law of the Moslem courts contained provisions which it was difficult for the government to enforce. The tentative beginnings of a more regular system of legal procedure were extended in the rule of Amherst and Bentinck (1823-35), a period when the spirit of legal reform inspired by Bentham was on foot in England.

There were two noticeable features in this process. The administration preferred to issue local regulations, suited to Indian conditions, rather than to reproduce the forms of English law. Secondly, all law, including native customary law, was administered through the regular tribunals, a process rendered easier by the fact that the subordinate personnel of the judiciary was Indian; no special courts were instituted for administering native law. The Indian Law Commissions of 1833, 1853, and 1861 laid the foundations of a uniform system of codified law, including that of crimes, criminal and civil procedure, evidence, contract, and the like. In drawing up these codes the conceptions of English law prevailed, though the form was adapted to Indian conditions; but codification left untouched the body of family law and the law of inheritance, while land tenures, being subject only to legislation in the provinces, retained their local characteristics. If the customary law has been regularized, it is owing to the study which has been given to it in Indian text-books, or to the fact that it has been administered by the same courts as the statutory law.

Expressed in the briefest terms, the chief problem of Rome was one of assimilation, and the Latin mind has tended to regard identity of legal rights as a more important element in assimilation than equality of political powers. The problem of the British was primarily to find a system of law which would avoid emphasizing to India the fact that it was passing under the dominion of a power professing an alien faith. Strongly therefore as they were impressed with the value of a uniform system of law, they were equally strongly moved by the need for maintaining the customary laws based on the social and religious life of India.

The student of jurisprudence who seeks to add to the history of law in the Roman and British Indian empires a chapter tracing its development in Africa will have this advantage—that he will have before his eyes a living process; and his study will possess a value for the lawgiver which no historical retrospect can supply. But his view of this development will also be influenced by a factor of which neither the Romans nor the earlier administrators in India were conscious. Legislation has now become the means of expressing the changes which a community deems best suited to

improve its social and material life; in Africa, the law imposed by the European powers is passing beyond its rudimentary purpose as an instrument for securing order, or maintaining existing social relations, and is entering on a more extended phase, requiring the enactment of a wide range of laws necessitated by new conditions.

The chief problems of legislation in Africa still lie, however, in the provision of a law of crimes, of rules of judicial procedure, and a simple form of procedure regulating commercial transactions, for it is common ground that at the outset anything beyond this must continue to be regulated by custom. Yet even here the lawgiver will have to ask himself if the law he introduces is so far alien to all the motives and associations which regulate the behaviour of the people affected as to fail to secure an instinctive respect from them. The modern conception of the function of law realizes that its process cannot be purely authoritarian; it obtains its most effective sanctions not from imposed obedience, but by evoking some answering contribution from those to whom it is applied. There are, moreover, many who believe that we ought not to limit ourselves to this obvious precaution against maladjustment. It is not, in their view, merely a question of making it easier for the lawgiver to secure obedience for his law. They would hold that whatever the value of African conceptions and practices as the basis of a system of regularized law in the European sense, they have a positive value as the expression of the forces which regulate African conduct, and that we ought to begin rather by inquiring how far we can use them as part of the foundation on which new African institutions can be built up. It is the same feeling as that which has inspired the larger use of native authorities as part of the executive administration.¹

Whichever view is taken, a knowledge of the background against which the lawgiver has to operate must have a definite value for him. There was a time when the study of the African's law or custom seemed to have little contribution to make to those who had to legislate for him, and the systems observed were thought to be so alien to European concepts as to disclose little of what, on the Austinian analysis then in vogue, seemed to be the essential

¹ See Chap. IX, pp. 527 ff.

characteristics of law. Later students have realized that Africa to-day is in one of the stages which at different times must have marked the development of law elsewhere. Changes in law and custom are closely parallel to changes in material culture; and in African observances we seem to be able to recognize definite stages accompanying the evolution of the hunting into the pastoral life, or the beginnings of agricultural settlement. The law of the ancient Babylonians, Hebrews, Romans, and Saxons had close analogies to what we see among the more primitive of the African peoples.¹ If there is any peculiarity in African legal institutions it is less one of intrinsic character than of the time at which they present themselves, for they exhibit to the modern world some of the scenes in a story which must have been enacted 5,000 years ago in parts of Mesopotamia, and at later dates in Rome, Germany, and Britain.

The nature of primitive law, in Africa as elsewhere, is still a controversial subject.² Its primary object has, however, been well defined as the desire to maintain social equilibrium, and its remedies are intended to restore any disturbance of that equilibrium. This accounts for its apparent deficiency on the penal or deterrent side, and in so far as it often treats offences as matters for compensation, for its peculiar manner of discriminating between crimes against society and wrongs against the individual. Here once more we have a familiar stage in the history of law; indeed, the process by which civil wrongs are turned into criminal offences is a development which accompanies the advance into a more complex political order. It is at the same time a fact that African law is not entirely wanting in some element of public law, since certain offences, such as treason to a chief, witchcraft or incest, as well as certain non-intentional offences (such as the production of twins) are in many cases treated as injuries to the community, and are met by the only remedy which can protect the unit, namely, the elimination of the offender by banishment or death.

¹ A. S. Diamond, *Primitive Law*, 1935, p. 174.

² J. H. Ariberg, 'The African conception of Law', *Journal of Comparative Legislation and International Law*, Nov. 1934; A. R. Radcliffe-Brown, 'Primitive Law', *Encyclopaedia of the Social Sciences*, vol. ix, 1933, p. 202; B. Malinowski Introduction to H. I. Hogbin, *Law and Order in Polynesia*, 1934; W. Seagle, 'Primitive Law and Professor Malinowski', *American Anthropologist*, vol. xxxix, part ii, 1937, pp. 275-90.

There is a further characteristic in which African law is different from European systems. It does not exhibit those sanctions which are so conspicuous in modern European life, the police force, the prison, or the processes for executing civil decrees. To some extent the necessity for securing obedience to law by penal sanctions is reduced by the fact that law represents not the act of a sovereign but the belief and practice of a community. It is no doubt as true of the African as it is of people in other stages of development, that most men obey the rules of society partly because they take them for granted, and partly because obedience pays;¹ but though this incentive would go a considerable part of the way, it cannot cover the whole field; there remains the problem of compliance where it is unduly irksome, or where individual character is strongly resistant. Here, two sanctions operate with exceptional force in Africa. The first is based on the sense that the law has the support, not only of the living community, but of its ancestors, who have power to avenge breaches of traditional discipline of which the African sees constant proofs in the events of everyday life. Moreover, the ancestral resentment of a breach may extend to the group, and it is in the interest of each member to avert it. There is thus a collective responsibility built on a potent spiritual belief. Somewhat akin to this, in that it can operate without the aid of extraneous authority, is the sanction derived from invoking the aid of magic to detect and sometimes to afflict an evil-doer. The effect of this is automatic and the firm belief in it affords a strong restraint on law-breaking.

It is possible that religious, magical, or social sanctions may have had a similar force in other civilizations at the stages of their material development corresponding to those of Africa, but there is certainly one feature in the African picture as seen to-day that must be unique. The strength with which new forces from many angles are playing on African social institutions can have no parallel in history. The lawgiver has to deal with social factors which are rapidly altering in the face of new conditions, and he has to find new sanctions which will take the place of the old. The very intensity of the feelings which gave them their force will deepen the gulf which their disappearance will cause.

¹ L. P. Mair, *Native Policies in Africa*, 1936, p. 271.

II. THE SOURCES OF LAW AND ITS GENERAL CHARACTER

The Union of South Africa is in its legislative as in its executive capacity now independent of any external control.¹ It is also characteristic of the Union that it is one of the heirs to the tradition of Roman law. The Roman-Dutch law which the first colonists brought with them was, however, rapidly permeated by the English common law. As early as 1827 the Charter of Justice introduced the jury system and brought the law of evidence into harmony with English law; henceforth the law in its procedural aspect (and it is the procedure of the tribunals rather than the principles of the law that gives it its character in the eyes of the population at large) became largely English. The question whether the Union should codify that Roman-Dutch and English common law which has so far escaped inclusion in the statute law is of juridical rather than of popular interest. The examples of codification in Ceylon and British Guiana hardly afford a precedent which a country with so carefully elaborated a system as the Union could be expected to accept as a guide.

The general character of the Union law is predominantly that of a system framed for the needs of a white population; the needs arising from the existence of a large African population have been met by the enactment of special laws relating to them rather than by a modification of the general body of law. There are at least thirty-five Acts which specially or differentially affect natives.² Since the law has been concerned primarily with the needs of the European community, the recognition of native customary law as part of the general body of law has come late and haltingly. The early lawgivers in the Cape evinced great reluctance to face the legal consequences of the absorption of the native people in their area. In theory the civil law of the Cape was applied to them, but in practice the magistrates were driven to disregard the law and to apply native custom, and the extra-legal native court at King William's town was a marked, if an anomalous, feature of the Cape system. It was only the special circumstances of the

¹ See Chap. VI, pp. 144-6. A. Berriedale Keith, *The Governments of the British Empire*, 1935, p. 49.

² E. H. Brookes, *The Colour Problems of South Africa*, 1934, pp. 202-4. See Chap. IX, p. 348.

Transkeian territories which compelled the Cape to make provision in 1879-94 for the application of native law to them.¹ In Natal, on the other hand, recognition of Bantu law had been one of the points of the Shepstone policy,² and this was formally accepted in an Ordinance of 1847. A codification of the native law of Natal was made in 1878 and was issued as a schedule to Law 19 of 1891. The recognition in the Transvaal and in the Orange Free State was strictly limited. As a result the most embarrassing legal situations constantly arose; thus as late as 1910 the Supreme Court of the Transvaal held that the children of native customary unions were illegitimate,³ and in another case in 1915 the court refused to recognize native customary law regarding the status of women;⁴ in the Cape Province in 1893, the Supreme Court of the Cape Province stated that the courts of law were bound, however much they might regret it, to treat intercourse between parties to a native marriage as 'illicit', and even in the purely native district of Glen Grey native customary marriages were ruled to be 'not immoral but illicit'.⁵

It was therefore a definite advance when section 11 of the Native Administration Act of 1927 gave a statutory recognition to native law in all provinces of the Union. It must be noted at the same time that this measure, in harmony with the political objective of segregation, was directed less to the maintenance of native law than to differentiating its field. Though it enables some provision to be made for dealing on uniform lines with cases involving questions of native custom, the Statute still leaves indefinite the position which native law is to occupy. It appears that it is open to the discretion of the courts to apply native law in civil cases even in the absence of statutory authority, wherever it satisfies the tests required under English and Roman-Dutch law for the recognition of local custom.⁶ It seems unlikely, however, that native law, other than that contained in statutes, will be applied to any appreciable

¹ H. Rogers, *Native Administration in the Union of South Africa*, 1933, p. 220.

² See Chap. IX, pp. 356-60.

³ *Rex v. Mboke* (445 T.S.C. 1910). Quoted by E. H. Brookes, *op. cit.*, p. 96.

⁴ *Meesadoosa v. Links* (357 T.P.D. 1915). Quoted E. H. Brookes, *op. cit.*, p. 96.

⁵ E. H. Brookes, *op. cit.*, pp. 96-7.

⁶ J. Lewin, 'The Recognition of Native Law and Custom in British Africa', *Journal of Comparative Legislation and International Law*, third series, vol. xx, Feb. 1938, part i, pp. 16-23.

extent where no special courts for natives have been created, as for instance in the major part of the Orange Free State and of the Cape. Perhaps the most urgent need in defining the field in which native law should be applied is in connexion with the provision¹ of letters of exemption to individual natives. If such letters were held by all Africans to whom native law can no longer be appropriately applied, the courts would be greatly assisted in applying the law which is just in each individual case. The rigid code in Natal makes exemptions imperative if real hardship is to be avoided. The customary law applicable in Natal is that contained in the Proclamation, no. 168, of 1932 which was based on the Natal Code of 1878 and the subsequent law of 1891: elsewhere it is the unwritten native law, as discovered from assessors, reported cases, text-books, and the like. On the criminal side, the native comes under the ordinary law, as extended by the body of differential statutes already referred to; he comes under native law only in so far as he commits an offence which is triable in a chief's court having criminal jurisdiction. Thus in Natal the Code of 1932 penalizes breaches of orders issued by chiefs, and the seduction of unmarried women, which would not be offences against statutory law.

In Southern Rhodesia the Roman-Dutch system was introduced by the Order in Council of 1898, which laid down that the law to be applied should be the same as that in force in the Cape Colony on June 10, 1891. Here, however, even greater inroads than in the Union have been made upon the system by local legislation and the adoption of English legal principles, as, for example, in such matters as arbitration, water rights, and community of property between married persons. In adjusting the law to modern conditions, Southern Rhodesia has been guided chiefly by legislation in the Union, whose most important enactments it has taken over in a modified form; an additional factor making for uniformity between the two territories is that appeals from the Southern Rhodesia Supreme Court are taken to the Appellate Division in the Union. As regards native law, the need for recognizing and maintaining it was acknowledged from the outset; the charter of the British South Africa Company prescribed respect for the native

¹ Native Administration Act 1927 (as amended 1929), sect. 31.

law of property, family, and personal rights; the Order in Council of 1891 contained a similar injunction; and the Order in Council of 1898 directed that in civil cases between natives the courts should apply native law so far as it was not repugnant to justice or morality, or any enactment in force. In effect natives are subject to the European criminal law, while in other respects the customary law has been considerably changed by enactments intended to eliminate what was thought undesirable, or to regulate the conditions created by the interrelationship of native and European law.¹ The Order in Council of 1898 and the Letters Patent of 1923 sought to control differential legislation by providing that without the consent of the Secretary of State disabilities could not be imposed on the native population alone.² Nevertheless, a large number of statutes make separate provision for natives in such matters as labour, residence, land, and the marketing of agricultural produce.

Passing to the British colonies and protectorates, it is necessary to premise that there is no logically clear distinction between the colony and the protectorate; the status of different areas has often been determined rather by historical accident than by legal theory.³ From the juristic point of view the distinction lies in the fact that the colony is in a full sense part of the possessions of the Crown, whereas the protectorate is a British possession only for international purposes.⁴ The original or basic law in territory which has become a British colony by settlement is the common law and equity, and the statutes of general application which were in force in England at the time the administration was created. In this sense the Englishman carries his own law with him. Where, however, in conquered or ceded territory, an administration existed before the country became a British colony, the previously existing law remains in force until modified by legislation.

In protectorates the same general principles have been widely applied by the original Orders in Council, and they would be applied by the courts to protectorates as to colonies. In the West

¹ See Chap. IX, pp. 376-82.

² See Chap. IX, p. 377.

³ A. Berriedale Keith, *op. cit.*, p. 463.

⁴ M. F. Lindley, *The Acquisition and Government of Backward Territories in International Law*, 1926, p. 183.

African protectorates 'English law has been assumed as the basis of law', and in the East African protectorates 'the principle was adopted of applying English common law, equity, and statutes of general application . . . and a like rule has been applied to Tanganyika'.¹ Where 'internal sovereignty gradually passes to the protecting power'² it becomes extremely difficult to draw a line between a protectorate and a colony.³ Nevertheless, the distinction is important in so far as the natives of British colonies are British subjects, whereas the natives of a protectorate are not full British subjects, and have not the rights of British subjects in the King's dominions. The appeal to the Privy Council can be made, as of right, by the natives of colonies and by the natives of those protectorates to which this right has been extended by Order in Council or by local legislation. Where this has not been done, appeal may be made only when leave is granted.⁴

Almost from the first the tendency was to meet the expanding needs of the colonies and protectorates not by extending to them imperial legislation, but by local regulation, which, as the dependencies came to be endowed with legislatures, took the form of local legislation. The great body of law in the British dependencies is therefore that secured by local legislation; what has been described above as basic or original law remains rather as providing guiding principles than substantive law. The power of legislation in colonies was itself based either on the prerogative right of the Crown to assign the form of government in a conquered or ceded area (as in Ashanti or Basutoland), or on the general authority which the Crown acquired under the British Settlements Act 1887 to establish a legislature in any British settlement. The setting up of legislatures in the Gold Coast and Sierra Leone is typical of the latter class of cases. In some territories, such as Northern Nigeria, the Crown legislates through the officer administering the government; but most African colonies now have legislative councils, variously constituted;⁵ the variety of their constitution is not reflected in any difference in their powers, which are

¹ A. Berriedale Keith in Halsbury, *Laws of England*, Hailsham ed. 1933, vol. xi, p. 245.

² M. F. Lindley, *op. cit.*, p. 187.

³ *Sobhuza II v. Miller* (1926), A.C. 518.

⁴ *Jerusalem-Jaffa District Governor v. Suleiman Murra* (1926), A.C. 321.

⁵ See Chap. VI, pp. 163-73.

uniformly unlimited in scope, save for the absence of any constituent authority. Control from England is secured by consultation between the Governor and the Secretary of State before important legislation is introduced, by the power reserved to the Crown to disallow any act of a colonial legislature, and further by a constitutional provision that in certain classes of bills the Governor shall not give his assent to an act as passed by the legislature without previous reference to the Secretary of State. Reports on all developments of policy must be submitted, and copies of all laws passed sent home with a report explaining their provisions, and a statement from the law officer to the effect that in his opinion the assent of the Governor may or may not be properly given thereto.¹

At the same time, the Crown retains to itself an important right, namely, to legislate in any area by its own Order in Council, in order to provide for cases in which local legislation cannot be secured without undue resentment or legal difficulty. We have thus three sources of law: first the old law of the colony, i.e. common law, though this has largely been modified or replaced by local legislation; second, local legislation either in the form of Acts of the local legislatures (which now comprise the great bulk of the body of the law) or Orders in Council, which are comparatively rarely used, or ordinances and proclamations of the Governor where this method is adopted in the absence of a legislature; and third, Acts of the Imperial Parliament. Though the Imperial Parliament retains unimpaired its right to legislate for any colony, that power is very seldom used, and on subjects of general concern the imperial enactment is if necessary extended to the colony by Order in Council, or in some cases the local legislature adopts the provisions of the imperial act.

In the protectorates law is based on the use of power derived from the Foreign Jurisdiction Act, 1890.² This gives the Crown almost unfettered authority; Orders in Council have full validity save in so far as they may be repugnant to any Acts of Parliament especially extended to the protectorates. The power of the Crown in legislation is absolute. The position in regard to agreements with native rulers is important. Since they were made by people

¹ Colonial Regulations nos. 153, 156.

² A. Berriedale Keith, *op. cit.*, p. 499.

subsequently brought under protection, they cannot be allowed international force. But since the natives of protectorates are not subjects of the Crown, and therefore in any suit against the Crown would seem to have only the status of foreign persons, such agreements cannot be held by the courts to have force where they conflict with subsequent legislation,¹ and it is probable that the Crown could not be sued on such agreements.² Under power given by the Foreign Jurisdiction Act the Crown may by Order in Council create a legislative authority, as has been done in Nigeria, or may authorize the Governor to issue ordinances, as for instance in the Northern Territories of the Gold Coast, or the High Commissioner to issue proclamations, as in Bechuanaland; in all three cases legislation is controlled in the same manner as in the colonies. The sources of law in the protectorates are thus the Orders in Council issued under the Foreign Jurisdiction Act, and the Acts of legislatures created under that Act, or Governor's ordinances where no legislature exists. We are not concerned here with the question of where sovereignty may be said to lie in the case of the mandates; the basis of the law actually prevailing in mandated territories is in essence the same as in the protectorates.³

The law of the colonies, protectorates, and mandates displays certain characteristics, due largely to the influence of the English law, apart from the adaptation of much of the English substantive law or its procedure. Thus the 'rule of law' is maintained in the sense that the executive is not assumed to have any powers, prerogative or otherwise, entitling it to take action against individual liberty or property, which is not covered by statute or common law. To this rule the possibility of pleading the defence of Acts of State for torts committed in protectorates must apparently be admitted as an exception.⁴ Though the colonial laws may give certain limited protection to officials in discharge of their duties, similar to that given in England,⁵ or by grant of partial indemnity from effect of suits, there is a uniform rule of law that administra-

¹ *Sobhuza II v. Miller* (1926), A.C. 518.

² E. C. S. Wade and C. G. Phillips, *Constitutional Law*, 1931, pp. 369-70.

³ M. F. Lindley, *op. cit.*, p. 266.

⁴ *King v. Crewe, ex parte Sekgome* (1910, 2 K.B. 576), quoted in E. C. S. Wade and C. G. Phillips, *op. cit.*, pp. 369-70.

⁵ Public Authorities Protection Act, 1893 (56 and 57 Victoria).

tive actions are judged by the ordinary courts. It is also rare to give to the executive authority power to fine or imprison without resort to judicial process.

In another respect, the English system has a feature not so far shared by others. It admits of the growth of subordinate legislation by native authorities, who have been given the power of making rules to the breach of which penalties attach. The nature of these rules is more fully explained elsewhere;¹ but the rules must be regarded as creating an addition to the general body of colonial or protectorate law.

The general aim of legislation in British colonies may be said to be directed towards producing a common body of law which is expressed as applicable both to Europeans and Africans. Differential or discriminatory legislation is infrequent, and only takes a pronounced shape in areas in which white interests are strong, as in Kenya; but while the general effect has been to produce a body of law common to both Europeans and Africans, it was from the first recognized that this could not cover the whole ground; in particular it could not regulate the inheritance, marriage, and similar relations of Africans living under their own customs. It is probable that, as the early administrators saw the picture, matters falling within the field of civil relations, and possibly also the bulk of the minor criminal offences (including offences against native custom) would be regulated by the chiefs, leaving the more serious crime, and the breaches of administrative law or regulation, to be dealt with by the statute law and by the colonial courts. The earlier Orders in Council contemplated that these courts should decide cases in which natives were parties 'according to substantial justice without undue regard to technicalities of procedure and without undue delay'. They further provided that 'in all cases civil and criminal in which natives are parties every court shall be guided by native law so far as it is applicable and is not repugnant to justice or morality or inconsistent with any Order in Council or Ordinance'.² That general prescription reappeared in a more definite form in many of the laws defining the jurisdiction of the courts; thus the law of the Gold Coast and of Northern Rhodesia provides that 'nothing shall deprive any person of the

¹ See Chap. IX, *passim*.

² Uganda, Order in Council, 1902.

benefit of any native customary law . . . such native customary law or custom not being repugnant to natural justice, equity, or good conscience, nor incompatible either directly or by necessary implication with any law for the time being in force'.¹ Those provisions, however, left a wide field of uncertainty as to the exact law which might be applied in any particular case.

The position, indeed, was more than one of uncertainty. If in a few instances, as in the Gold Coast, the trial by the British courts of certain prominent types of cases led to the growth of a case law based on native law, elsewhere native law remained for the most part outside the regular legal system. The position has in great measure been met by the recognition of native courts as part of the judicial system, under the policy of indirect rule, a step which may be regarded as the effective integration of native law into the general system. The native courts now dispose of a growing body of litigation and apply to it the native customary law, subject to the repugnancy conditions.² Where their decisions come up in revision or appeal to administrative officers or appeal to the courts with European personnel, native law is again applied. This in effect brings into the general body of law all that unwritten native law which deals with land, inheritance, family relations and the like; and also adds to the criminal law a number of offences in the shape of actions violating tribal custom, which would not be classed as offences under English law.

The source of much of the law now in force in the French African colonies has been a matter of juridical controversy,³ but the operation of the present system, which has been described elsewhere,⁴ is clear. The law itself is characterized by the recognition of two classes of rights, the rights of citizens, who are justiciable under the *justice française*, and those of subjects, who are justiciable under the *justice indigène*. The citizen status is shared by some Africans⁵ and also strangers who in their own countries have European or similar status.⁶ Persons coming under the *justice*

¹ Gold Coast, *Laws*, cap. 158, sect. 19; Northern Rhodesia, Ordinance no. 18 of 1933, sect. 17.

² Tanganyika Territory, Native Courts Ordinance no. 5 of 1929, sect. 13. For the native court system, see Chap. IX, *passim*.

³ S. H. Roberts, *History of French Colonial Policy*, 1929, vol. i, p. 149.

⁴ See Chap. VI, pp. 185 ff.

⁵ See Chap. VI, pp. 194-200.

⁶ P. Daresté, *Traité de droit colonial*, 1931, vol. i, p. 268.

française are regulated by the French *Code Civile*, *Code de Commerce*, *Code Pénal*, and similar metropolitan laws, modified where necessary to suit colonial conditions,¹ and are justiciable by courts of justice which are constituted on the metropolitan model as nearly as local circumstances permit; the most significant difference is the substitution of judges and assessors for the jury system, and the admission of administrative officers to act as *juges de paix*.²

Africans are regulated by native law and custom and are justiciable by native tribunals—a term which has not the same connotation as in British territory.³ The operative provision of law under which native law and custom is recognized is that which defines the jurisdiction of the native tribunals. This⁴ declares that in all civil and commercial matters the customary law of the parties shall be applied; and that in criminal matters the courts 's'inspirent de la coutume du lieu de l'infraction, aussi bien pour déterminer les faits répressibles judiciairement que pour déterminer la gravité de la sentence, dans la mesure où il n'en doit résulter aucune atteinte à l'ordre public'. The term *ordre public* has acquired a technical sense as expressing the ideal of civilization subject to colonial conditions.⁵ The significance of the provision quoted, however, is that offences of any degree of gravity, including those for which provision would elsewhere be made by statutory law, are decided by native law. There is therefore so far as the African is concerned no statutory code of crimes or of criminal procedure. Native tribunals are bound by statutory law only in respect of the special enactment against slavery and cannibalism. So far then as the statutory law is concerned, it is largely designed for the regulation of the non-native, the native being justiciable only by native tribunals.

The colonial law shares with the French law the principle of the *droit administratif*; that is to say, that though the ordinary courts can question the legal validity of an *arrêté*, administrative actions as such are judged not by the ordinary courts, but by a special administrative court.⁶ In actual practice the *droit administratif*, in the form it has assumed in modern French law,

¹ A. Girault, *Principes de colonisation et de législation coloniale*, 1927, vol. ii, pp. 348 ff.

² Ibid., p. 339.

³ See below, pp. 290-1.

⁴ *Décret réorganisant la justice française en Afrique occidentale française*, Dec. 3, 1931.

⁵ A. Girault, *op. cit.*, p. 407.

⁶ P. Dareste, *op. cit.*, vol. i, p. 522.

is surrounded by safeguards which make its exercise far less of an invasion of private rights than is often supposed.¹ In addition the existence of the *régime disciplinaire de l'indigénat* gives the executive a wide power of inflicting extra-judicial punishment.² Its operation is limited to non-citizens, and can be applied to any breach of regulation declared by local *arrêté* to be an offence. Thus the *arrêté* of 1924 relating to the French Cameroons enumerates thirty-four *infractions spéciales* ranging from acts of disorder to delay in payment of tax. The maximum penalty which can be inflicted is fifteen days' imprisonment or a fine of 100 francs. French authorities have themselves recognized that the provision is of an abnormal nature; there have been occasions on which it has been described as only a temporary measure. The tendency of recent years has been to reduce the number of offences to which it applies, to restrict the maximum penalty in more progressive areas, and to extend the list of Africans exempted from its operation on account of their social rank or the like. In the greater part of French West Africa the maximum penalty is now only five days. There is also evidence to show that in some areas the use made of the system is very carefully supervised, all cases being reported to head-quarters; it is, however, proper to add that there are other areas in which its use is uncontrolled, and seems to extend beyond the limits assigned to it in the regulations. The extension of the *indigénat* to cover internment up to ten years in the case of persons guilty of acts compromising public safety, for which provision has been made in Togo and the French Cameroons, is an unusual measure applying to exceptional circumstances, and has its parallels elsewhere.

The sources of law in the Belgian territories have been described above.³ At the outset policy seems to have been directed by the view that the statutory law, based on the Belgian model, could become the prevailing law applying to all classes. It would regulate the civil rights of Belgians, strangers, and *immatriculés*. Africans would be regulated by native customary law, so far as it was not inconsistent with legislation or *l'ordre public*, but *immatriculation*⁴ would provide an avenue by which perhaps the majority of the

¹ See M. Nagendranath Ghose, *Comparative Administrative Law*, 1919.

² P. Dareste, *op. cit.*, vol. ii, pp. 499, 507.

³ See Chap. VI, p. 206.

⁴ *Ibid.*, p. 212. See also Decree of May 4, 1895, and *Arrêté* of May 18, 1900, in *Codes et lois du Congo belge*, pp. 526 and 1307.

African population would in time be absorbed within the range of civilized law. The process of *immatriculation* has, however, been slow, and present policy, influenced by the growth of the view which emphasizes the value of utilizing native institutions, points to the recognition of the importance of native law. It looks rather to the gradual assimilation of native law to civilized conceptions and practice, than to an early absorption of Africans within the range of the statutory law. The old policy of *immatriculation* has so far lost its force that when the native courts were instituted in 1926, even Africans who were *immatriculés* were made subject to them. In the Congo, as elsewhere, the institution of native courts, properly so called, has given a new position to native law. For civil purposes the African comes under his own law, and this now becomes part of the general law, in so far that the decisions of the native court form part of the recognized judicial process. The native law applied is of course subject to the condition of repugnancy to *l'ordre public*. For criminal purposes Africans are regulated by the Penal Code and Code of Criminal Procedure, as administered by the Belgian courts in the colony. Native courts are, as far as possible, restricted from trying cases which come under the Penal Code, but as the distinction between civil and criminal matters is not always clear to the native courts, many cases are disposed of by them which might otherwise have been held to come under the Penal Code. The constitution of the native courts extends the scope of the criminal law where Africans are concerned, in that the native courts are allowed to take cognizance of offences against native law which are not within the scope of the written law; but offences against the state, breaches of administrative regulations, and the more serious criminal offences always come for trial under the regular criminal law.

There is therefore considerable difference in principle between the French and Belgian systems. The Belgian differs further from the French, in that it does not recognize the system of 'disciplinary penalties' or *indigénat*. It is to be noted, however, that the decree of 1918 (applicable to Africans only) which provides a penalty up to seven days' imprisonment for 'infractions à des mesures d'ordre général'¹ supplies to some extent the place of the *indigénat* in

¹ *Codes et lois du Congo belge*, p. 742.

French territories. It is applicable to any action in contempt of authority, and has been given a very wide interpretation. It differs from the *indigénat* in that punishment follows a judicial process; in effect, since the administrator can deal himself with the case in his quality of a police magistrate, its difference is not great.

The processes of legislation in the Portuguese colonies have also been described in Chapter VI.¹ A decree of 1920 made provision for the codification of native customary law and in 1929 a series of statutes was issued defining the political, civil, and criminal status of Africans. These aim at bringing them under their own law to be administered in special courts. Africans who have adopted European standards of living fall under the same legislation as is applied to Portuguese subjects.²

At this point, there is one outstanding feature which calls for comment, namely, the diversity of method by which legislation is obtained. In the British colonies, where the use of the Order in Council is now the exception, the bulk of legislation is passed after discussion in local legislatures, and the same is true of many protectorates. The composition of the legislatures may not give representation to the majority of the population in the technical sense; but discussion has the material advantage that it enables (and on some occasions compels) the lawgiver to take account of the views of persons capable of expressing the feelings of the majority. The French and Belgian system of legislating by ministerial decree has the advantages of elasticity and dispatch; but French authorities have themselves criticized the system as something of an anachronism in modern conditions. The remarks of M. Paul Leroy-Beaulieu³ referred perhaps in particular to those French colonies which have representation in the French Parliament, but they have also a general application: 'C'est un empiétement du pouvoir exécutif sur les attributions essentielles de la représentation du peuple; il a pour conséquence, en outre, de faire artificiellement le silence autour des questions coloniales, de les enterrer sans bruit.' Belgian writers have also criticized the system as

¹ p. 213.

² J. de Penha Garcia, *Organisation politique et administrative de l'empire colonial portugais*, 1935, pp. 247-8.

³ P. Leroy-Beaulieu, *De la colonisation chez les peuples modernes*, 1908, vol. ii, p. 670, and S. H. Roberts, *op. cit.*, vol. i, p. 153.

applied to the Belgian Congo, on the ground that it withdraws initiative from colonial authorities;¹ at all events it seems to make initiative depend on the personal relations between the Ministry and the Governor-General. The remedy suggested is the resumption by Parliament of its full responsibility for legislation followed by a delegation of defined legislative power to local authorities. The solution must perhaps await a change in policy which would make possible the creation of some form of local legislatures.

It is a secondary consideration, though one that may appeal to the jurist, that the British system leads to what appears to be an unnecessary lack of uniformity in the law as between territories similarly placed. It must be remembered that the statutory law hardly touches the field of family relations, inheritance, or tenure of land, where local circumstances would normally be reflected in variety of law. Certain efforts have been made to introduce something of a common form. At the outset the East African colonies secured some measure of uniformity by adopting certain of the Indian codes; some of these have now been replaced by local Acts, which have followed the form of models drawn up by the British Colonial Office. A far greater measure of general uniformity could however be attained in the ordinary law, as apart from the law of family relations and the like.

There is one other point worthy of note. The British method of publishing laws and local regulations gives them in an accessible form, but the French decrees and local regulations are not issued in a form easily available to the public. The failure to publish them in a consolidated form results, as French authorities themselves complain, in much confusion and in frequent doubts as to jurisdiction.²

III. THE ADMINISTRATION OF JUSTICE

In the present circumstances of Africa the procedure of the law and the machinery for the administration of justice are matters of greater interest to the population, and affect its respect for law more vitally, than any matter of legal principle. Throughout the different territories there is a variety of practice which it would

¹ P. Ryckmans, *La politique coloniale*, 1933, pp. 21-2.

² S. H. Roberts, *op. cit.*, vol. i, pp. 152 ff.

be impossible to describe in detail; but it is necessary to summarize its main features.

Taking the Union first, the machinery for the administration of justice presents the picture of a superior judiciary thoroughly organized; it has the Supreme Court for the whole Union, constituted under sections 95-112 of the South Africa Act, with a strong appellate division, a provincial division for each of the four provinces and three additional local divisions. These courts are recruited from 'professional' sources, and are of standing and independence. In addition, the Native High Court of Natal has been retained as a permanent criminal court, but unlike the other courts, the judges are not necessarily professional but rank as civil servants: Act 49 of 1898, however, provides that at least one judge shall have been an advocate.

The subordinate judiciary retains something of its original character as part of the general administration. The magistrates, who have civil as well as criminal jurisdiction,¹ are members of a civil service discharging both administrative and judicial functions. The system by which magisterial functions are exercised by officers of the Department of Justice or the Native Affairs Department, according as the population of the district concerned is predominantly native or European, is discussed elsewhere.²

Save for the limited extent to which the chiefs' courts (which will be subsequently described) dispose of minor criminal cases, the native population is regulated by the ordinary criminal law of the Union as administered by the courts described above. It meets here certain obvious difficulties. One is due to the fact that natives are not eligible to serve on juries. In 1917, it is true, the right was accorded to accused persons of claiming to be tried by a judge with assessors, instead of by jury;³ but non-Europeans were seldom aware of their rights in the matter, and jury trials continued to be the rule. Since 1935 accused persons have had the option of trial by a judge without a jury (the judge may summon assessors), and the Minister of Justice has power, in cases of alleged offences by non-Europeans against Europeans, or

¹ See Act 32 of 1917 as amended by 39 of 1926.

² See Chap. IX, p. 368.

³ Criminal Procedure and Evidence Act 31 of 1917, sect. 216.

by Europeans against non-Europeans, to direct that the trial shall be by a judge without a jury.¹

A further difficulty is inherent in the machinery of justice rather than the law itself. The Union does not prescribe for magistrates any standard of knowledge of the vernacular; there is a wide use of interpreters, often Europeans of no great capacity. Further, there is evidence that magistrates trying certain classes of cases, notably stock theft, are at times exposed to considerable public pressure—a position which might perhaps be less difficult for them if they belonged to a cadre controlled by the Supreme Court. Much of the work of magistrates, where natives are concerned, consists in trial of the offences growing out of special laws applicable to natives. The proportion of natives charged with offences classified as 'serious' was in 1936 some 5.06 per cent. of the total native cases before the courts against a proportion of 2.65 per cent. in the case of Europeans, the number of stock thefts among natives accounting to a great extent for the difference. The large number of cases coming under the special laws, such as illegal possession of native liquor (70,957), Native Pass Laws (63,149) and Native Taxation Act (63,072),² illustrates the point made by General Smuts, as Minister of Justice, that the criminal system of the Union creates an undue proportion of 'statutory' native offenders.

In civil suits natives who come into the courts of the Native Commissioners, to whom reference is made in a previous paragraph, have the benefit of their own law, and appeals are carried not to the Supreme Court, but to the two special Native Appeal Courts.³ Each is composed of a president and of two Native Commissioners or other qualified persons. The policy of racial separation has kept native law in a field of its own, and civil cases arising under native law are tried by tribunals which, while following European procedure with a certain amount of flexibility, are also guided by native custom and law and from which appeal lies to a court admitting similar principles. When conflicting decisions are given by a native appeal court, the Minister of Native

¹ General Law Amendment Act 46 of 1935, sect. 36.

² *Official Year Book of the Union of South Africa*, 1937, p. 424.

³ Act 38 of 1927.

Affairs may in certain circumstances cause a case to be stated for decision by the Appellate Division of the Supreme Court.¹ The separation between native law and European courts is not therefore complete. It is clear that the tardy recognition given to native law has already resulted in a considerable measure of europeanization, particularly in regard to such matters as testamentary disposition. The measures taken to codify native law in Natal² no doubt did something to preserve it at a time when native customary institutions were the object of attack by certain missionaries and were held in small regard by many administrators; but it also made its own modifications in the interests of assumed social improvement, such for instance as the regulation of *lobolo*.³ The process of adjustment, therefore, was not one in which law follows changing social relations; social relations were being directly influenced through the law.

The Union has in another respect a legal problem of unusual difficulty. It has to provide for natives who still retain (as in Zululand) a great part of their own customary observances; but it has also to provide for a population which is rapidly passing under europeanized conditions, but is not so fully europeanized as to come easily under European civil law. Difficulty arises, for instance, from the fact that natives who marry by Christian rites come under the European marriage law, and thereby abandon to an uncertain extent their rights and duties under native law. Both in its numbers, and the extent to which it has departed from native traditions, this part of the population is much more prominent in the Union than elsewhere.⁴ No conscious effort seems yet to have been made to adjust the judicial system to the needs of this class.

As will be seen, other territories have resorted to the increasing use of purely native courts, partly in order to supplement a restricted judicial machinery, and partly in order to meet the recognized need for the administration of native customary law. The Union has not hitherto attached the same institutional value to native courts as they have acquired in the philosophy of indirect

¹ Act 38 of 1927, sect. 14.

² See Chap. IX, pp. 358-9.

³ *Lobolo*, bride-price: see Chap. II, p. 41, note (3).

⁴ See Chap. IX, p. 509.

rule. At an early date the administration maintained certain judicial powers for the British Bechuanaland chiefs¹ and for those of Natal, but no general recognition of the principle was made till the Native Administration Act of 1927 provided for the grant both of civil and criminal jurisdiction to chiefs and headmen. The civil jurisdiction in cases arising out of native law and custom was to be without limit subject to appeal to the Native Commissioner; the criminal jurisdiction, confined to offences punishable under native law and custom, was limited to authority to impose a fine up to five pounds or two head of cattle. At the moment, however, the process retains something of its former extra-legal character. Fines are disposed of by tribal custom, and little has been done to give to the proceedings, by a system of record or the like, the regular judicial character which they are beginning to take elsewhere. The Native Economic Commission of 1930-2 noted the improved position given to these courts under the Act of 1927 and held that they afforded a better system than that of the administration of native law 'by European officials who in many cases know it only from books, and are ignorant of its subtle implications', and added that 'competent witnesses agree that substantial justice, according to native conceptions, can generally be obtained in a Native Court. European procedure is wholly strange to natives and is certainly not adapted to bring out the true facts when applied to a primitive people.'² They recommended a wider extension of criminal jurisdiction to native courts. The use made of the power has been unequal: in the Transvaal, 89 chiefs have criminal and civil powers and 9 have civil powers only; in the Ciskei none of the 7 recognized chiefs has judicial powers; in the Transkei 6 of the 29 recognized chiefs have civil, but none has criminal, powers; the 6 British Bechuanaland chiefs have civil and criminal powers; so also have 80 chiefs in Zululand, but the other 122 chiefs in Natal have civil powers only; in the Free State 3 chiefs have civil powers and 2 of these have criminal powers as well. It is unfortunate that no figures are published showing the extent of the work disposed of by these courts.

Amid the great variety of conditions characterizing the judicial

¹ H. Rogers, *op. cit.*, p. 225.

² *Report of Native Economic Commission, 1930-2*, U.G. 22, 1932, para. 225.

system of the British colonies and protectorates, there is one feature common to all. Each major territory has its own High or Supreme Court, which serves as a Court of Appeal, and has original jurisdiction in certain important civil and criminal cases, with power to issue prerogative writs of habeas corpus, &c. Some co-ordination has been effected by the creation of East and West African Courts of Appeal from the decisions of the local High or Supreme Courts; the majority of the Eastern and Western colonies share in this system, though Northern Rhodesia is still an exception. There is a proposal to create a Court of Appeal for the two Rhodesias, possibly including Nyasaland; civil appeals from Southern Rhodesia would, however, continue to be dealt with as at present as they involve Roman-Dutch law. An appeal lies from these courts, as from the Union Court, to the Privy Council; in the latter case however, leave to appeal must be expressly granted by the Union government and is only so granted in exceptional cases.¹ The appointments to the High and Supreme Courts are predominantly of a 'professional' nature; the judges are liable to transfer to and from all British colonial territories. There is a further point of importance. In some territories with extensive areas, the insufficiency of the cadre of judges has necessitated the grant to certain senior administrative officers of the position of additional judge, or the conferring of extended jurisdiction on selected magistrates.

The officers exercising subordinate (i.e. magisterial) jurisdiction belong at present predominantly to the administrative cadres; the policy of substituting a 'professional' class will be subsequently discussed. Normally a magistrate makes the preliminary inquiry in charges scheduled as serious, such as homicide, rape, and arson, and either dismisses the case or commits for trial before a circuit judge. Cases not falling into the scheduled class are normally disposed of in summary jurisdiction. Here the variations of competence are considerable, and do not seem capable of any logical explanation. A common competence is up to six months' imprisonment; but in some cases this extends to two years, in others up to the full limits imposed by law on any class of offence; in Northern Rhodesia even homicide cases are triable by magistrates. This variety of

¹ E. C. S. Wade and C. G. Phillips, *op. cit.*, pp. 376-7.

competence is to some extent adjusted by the general existence of a rule that a record of all magisterial cases is submitted to the High Court; those over a certain amount (for which six months may be taken as typical, though in some territories the limit extends to two years for certain classes of courts) require confirmation by the High Court, and all others are liable to revision. There exists as a rule a liberal right of appeal, but the difficulties experienced by natives in making appeals, owing to distance and the like, give to the process of confirmation and revision a greater practical importance than that of appeal.

This general outline of what may be described as the 'colonial' court system would hold good for the greater part of British colonial Africa. In the form which the system now takes it is designed to dispose of cases involving non-natives, to exercise jurisdiction over natives in areas where native courts do not exist, and where native courts exist, to deal with cases involving natives which are held to be unsuitable for these courts. Within the native court jurisdictions, the 'colonial' courts besides dealing with cases of serious crime, take cases such as witchcraft, mixed cases, such as masters and servants, cases to which the administration attaches importance (such as stock theft in Kenya), and breaches of certain administrative laws. In Northern Nigeria the 'colonial' court system has a diminished function owing to the high degree of jurisdiction given to the emirate tribunals, and similarly in Buganda where the Lukiko court¹ exercises wide jurisdiction, subject to revision by the administration. Even in its fullest and most complete form, however, the 'colonial' court system was always bound to leave to other agencies the bulk of native civil disputes, the lesser criminal offences between one native and another, and breaches of customary law. In practice all those classes of cases were settled by processes which were not recognized in the law of the territory. The chapter dealing with native administration gives some account of the historical development of the native court system. The recognition of native courts as part of the judicial system has been an essential feature of the political policy of fostering native institutions as a necessary factor in native development. That these courts should be of great diversity, alike in the

¹ See Chap. IX, p. 444.

composition of tribunals and the competence assigned to them, is inevitable; the local circumstances, which have produced an almost endless variety of native authorities for executive purposes, have produced a corresponding variety of native tribunals. The warrant recognizing or creating a court appoints in some cases the chief to function as a court, in others several chiefs, or a chief and his councillors, the latter being sometimes named by the administration, at others left to the operation of local custom. In other areas again, where no definite organization of chiefs and subordinate chiefs exists, the warrant recognizes what is in effect a village moot. In some cases the chief did not actually hear cases; they were discussed before him or in his absence as the case might be, for he was often, and frequently is still, a sacred and religious personage not easily approachable and far from the modern conception of a local native authority or president of a court. Where Africans are living in non-native areas outside tribal conditions, the administration has created tribunals, as it has created native executive authorities, by the appointment of local notables. The appointment of courts as such has introduced a principle not hitherto admitted in African society, which did not recognize a clear separation between judicial and executive functions; nor is this separation always clear under the present systems, which generally use the same person in the two capacities; the chief who makes rules by authority given in the native authorities ordinances often sits in judgement on offenders against them. Encouragement to distinguish these functions has been given in executive orders issued to chiefs in Northern Rhodesia to appoint separate judicial and executive councillors, the latter to include a younger element, while in Kenya traditional chiefs have no recognized place in the judicial system and are sometimes excluded from it.¹

In many cases the native court system has been graded to allow of a variety of competence as between larger and smaller units; and a more recent evolution has made provision for cases being taken on appeal from subordinate courts representing smaller units to superior courts representing larger units. From the superior native courts appeals may go, as in Tanganyika, to the British

¹ See Chap. IX, p. 389.

officer in his administrative capacity, thence to his superior officer and to the Governor; or, as in Kenya and Nyasaland, to the administrative officers and thence to the High Court; or again, to magistrates' courts and to the High Court as in Northern Rhodesia and, in certain classes of cases, in Nigeria and the Gold Coast. Sometimes, however, there is no power of appeal. Such is the position, except in the more important cases both civil and criminal, in the Buganda courts, and also where final native appeal courts have been instituted, as in Nigeria; here the only remedy is application on revision. The competence of native courts varies considerably; in Tanganyika, for example, subordinate courts have powers of one month's imprisonment or a fine of £2 10s., and higher courts of six months' imprisonment and a fine of £10; in Nigeria, powers in the four grades of courts vary from that of three months' imprisonment to full powers in the courts of the emirates, including the death sentence which is, however, subject to confirmation by the Governor. Fuller details regarding the constitution of native courts in the different territories are given in Chapter IX.

At the time when the native courts generally (with the exception of such courts as those of Buganda or the emirates in Northern Nigeria, which were on a special basis) were primarily envisaged as dealing with matters relating to native law and custom, it was always understood that they would treat as offences against native law crimes such as thefts, assaults, and the like; it may be said that the administrations encouraged this development, while reserving to the 'colonial' courts the trial of graver criminal charges and of breaches of administrative laws, or regulations made under them, such as those relating to taxation, Masters and Servants Acts, and the like. In some British territories there has been a growing tendency to bring within the jurisdiction of the native courts a number of offences constituting breaches of these administrative laws. This has been effected either by definite extension of their jurisdiction, or through the process by which native executive authorities are encouraged to adopt, as 'Native Authority Rules', administrative ordinances or regulations, with the result that breaches of such rules become cognizable by the native courts. It will be found in consequence that in many areas the work

of the native courts is not merely supplementary to that of the 'colonial' tribunals but is tending to replace it on an extending scale.

Important safeguards applied to the native court system are the provisions for supervision and appeal. Supervision is everywhere exercised by administrative officers, but different methods are adopted to secure that all records come under their notice. In some cases copies of records are sent periodically, in others courts are visited on tour, but in theory at least all records are seen. Supervising officers have authority to revise, to order re-trial, or to transfer to their own court, and they act either on their own initiative on inspection of records, or on complaint made to them. When they act on complaint the procedure is in a sense an informal appeal, differing from a regular appeal in that it is at the officer's discretion to examine the case. Circumstances make the informal complaint more popular than the formal appeal; in petty cases it is usual for a dissatisfied party to wait for the district officer's visit to his area; thus his complaint can be heard without the trouble or expense of a journey, and his chief is less likely to be displeased. Other safeguards, and these are as important to the African litigant as the two already mentioned, are provided by the procedure and environment of the native court itself, which usually ensure a degree of publicity and open discussion which is impossible in the formal proceedings of the European courts.¹

There is in the British territories an interesting adjunct to the 'colonial' system which at the same time has some of the advantages of the native court. The subordinate magistrates' courts instituted in certain areas (notably in Tanganyika and Kenya)² deal with the needs of African populations in locations, towns, and mining areas and certain coast areas in which the mixture of population makes it impossible to create courts on the tribal, clan, or a similar basis. They are subordinate to the High Court, and are presided over by Khadis, Liwalis, and similar non-European paid officers of government. Where native custom is concerned, they adopt the law of the parties so far as it can be ascertained by local inquiry; and for the rest, appear to apply a kind of rule of equity.

¹ See below, p. 297.

² See Chap. IX, pp. 515, 518.

In the French colonies, the system of *justice française* is, as already shown, administered by professional courts based as nearly as circumstances permit on the French model; the decisions of the local Courts of Appeal at Dakar and Brazzaville are in certain circumstances appealable to the metropolitan *cour de cassation*. But the *justice française* deals only with a very small part of the judicial work in the country; the bulk is regulated by what is in effect a separate system, that of the *justice indigène*. While there are some differences between the system in French Equatorial Africa, as described in the Decree of April 29, 1927,¹ and French West Africa, as laid down in the Decree of December 3, 1931, the latter may be taken as representing the system in its developed form. It is noteworthy that the French government began by recognizing the judicial authority which treaties had seemed to secure to certain of the chiefs, but on conditions which seemed to anticipate the unsuccessful exercise of it, which did in fact occur. Their powers were then swept away by a series of decrees ranging from 1912 to 1924, and the only position which the system now gives to the chiefs, as such, is the formal power of 'conciliation' in civil disputes. An agreement in conciliation when brought before an administrator and duly registered acquires judicial value.

The *tribunaux indigènes* are now, for criminal purposes, the *tribunal de premier degré* in the subdivision, and the *tribunal criminel* in the *cercle*, the first presided over by an administrator with two African assessors whose vote counts on a joint decision, the second presided over by the *commandant du cercle* with two African and two European assessors. The first court has a restricted competence, but the second has full jurisdiction, with competence up to sentences of death. The civil courts are, first, the *tribunal de premier degré*, which, sitting on its civil side, can be (and often is) presided over by an African notable, and, second, the *tribunal de deuxième degré* in the *cercle*, presided over by the *commandant du cercle* and two African assessors having a vote which counts on a joint decision. This court has high original jurisdiction in civil matters and appellate powers over the civil work of the *tribunal de premier degré*. At the head-quarters of each colony in French West Africa there is now a *tribunal colonial d'appel* composed of a 'professional' presi-

¹ A. Girault, *op. cit.*, vol. ii, p. 499.

dent, two administrative officers, and two African notables. It takes in appeal the civil cases which the *tribunal de deuxième degré* has heard on its original side; on the criminal side it hears appeals from the *tribunal de premier degré*. There is, finally, at Dakar the *chambre d'annulation* composed of a professional president and two councillors, two administrative officers, and two African assessors. It sits in revision on civil matters, in which cases are referred to it by the *Procureur Général*, and is the final court of criminal appeal from the *tribunaux coloniaux d'appel*.

The *tribunaux indigènes* thus differ widely from the native courts of British territory. They are the sole agency for administration of justice to Africans. But they are institutions framed on a European rather than an African model. They draw no support from traditional sources, save in so far as the African assessors command local respect, nor do they follow the methods of procedure, such as the public discussion of evidence and findings, which preserve the native character of the British native courts. They are native mainly to the extent that they are not regulated by the statutory law. It would seem further that the system must leave a great many cases to be settled extra-judicially; as compared with the large number of native courts in the British colonies, the French have only one court in each subdivision. In all French West Africa in 1934 only 8,835 civil and 9,266 criminal cases were decided, to which must be added 7,935 *ordonnances d'arbitrage*; these figures may be compared with those for Nigeria; in the same year 244,077 civil and 117,363 criminal cases were heard in the native courts, to which must be added 8,640 criminal cases heard in the protectorate court. The African population of French West Africa is about 14,500,000 and that of Nigeria about 19,000,000. Though the French law forbids chiefs to deal with criminal cases, yet a great number of disputes involving criminal offences must presumably be settled by conciliation or some other unrecognized process.

The Belgian system in its present form represents some departure from the original principle of the *Charte Coloniale*, which appeared to contemplate a wide extension of the system of professional tribunals. The incompatibility of any such system with African needs, quite as much as the lack of personnel, showed at

an early date that this scheme was impracticable. An informal system of 'palavers' failed to fill the gap, and the pressure of facts produced the reorganization of July 9, 1923,¹ which gave judicial powers to administrative officers, and the decree of April 15, 1926, which gave the native tribunals a place in the judicial system. There still remains, however, enough of the original tradition of the *Charte Coloniale* to give professional justice a strong place in the Congo system: and the professional magistrates are proportionately more numerous in the Congo than elsewhere; in 1936 there were 70 *magistrats de carrière*, including the *cour d'appel*, the *procureurs généraux*, the judges, and the *magistrats à titre provisoire* who may preside over 'professional' courts; these numbers compare with 229 *administrateurs territoriaux* who have judicial functions as judges in the *tribunaux de police*. A decree of 1934 makes it necessary that non-native cases should come before a 'professional' court. This was a swing back in favour of professional justice. It is worthy of note, however, that the period of two years' probation which officials must complete before permanent appointment as magistrates may be served in the administrative cadre; this does not, of course, dispense with the requirement of professional training.

Before describing the hierarchy of courts in the Congo it is necessary to explain the *Parquet* and its functions. This is a body which in some measure corresponds to the Attorney-General's department in a British colony, though its functions are much wider. Its personnel are mainly professional lawyers, but the Governor-General also appoints administrative officers to assist the *Parquet* in the discharge of its functions. Officers of the *Parquet* act as prosecutors in the criminal courts. They are also charged with the duty of conducting inquiries concerning the behaviour of magistrates and alleged abuses. But the function of this department does not end with legal administration; it also exercises judicial functions. The revision of judgements given in the police courts is entrusted to it. Furthermore, its officers sit as courts (*tribunaux du parquet*) and are the regular court of first instance in civil suits involving non-natives. On the criminal side, officers of the *Parquet* may exercise jurisdiction over cases which demand

¹ J. M. Jadot, 'La justice répressive au Congo belge', *L'Afrique française*, 1936, pp. 387 ff.

prompt action in areas more than twenty-five kilometres from the nearest regular criminal court.

The system of regular criminal tribunals now begins with the *tribunal de police* in each of the 104 'territories' into which the Congo is divided for administrative purposes; the *tribunal* is presided over by an administrator and its jurisdiction extends to all offences in which the maximum legal penalty does not exceed two months' imprisonment or where the maximum is five years, but the court considers two months adequate. For petty offences, the police court may sit without an officer of the *Parquet*. The decisions of the court are subject to revision by the *Parquet*. The *Parquet* receives the record and can revise on its own motion or at the request of the parties. The next higher criminal court is the district court, where the district commissioner has jurisdiction over all offences committed by natives. It is also a court of appeal against judgements of the police court (subject to some restrictions).

Over this system of police and district courts there is the Tribunal of First Instance for each province, a purely professional court, with appellate criminal jurisdiction in regard to first instance decisions of the district courts and revisionary decisions by the *Parquet*, and original criminal jurisdiction for crimes committed by non-natives. There are again, above this, two courts of appeal for the whole Congo, one at Léopoldville and one at Elizabethville, both professional in constitution. There is an ultimate appeal to the *Cour de Cassation* in Brussels.

In addition, however, to this system of regular courts, the Congo now recognizes the native court. Its development has a double source. It was designed to fill the gap caused by the insufficiency of the original system of European courts, but the principle has in recent years received support from those who share the feeling that African institutions have their own intrinsic value. The courts now recognized are first the *tribunaux de chefferie*, which are in effect the customary courts of chiefs; the *tribunaux de secteur*, which are 'created' in the sense that they combine units insufficient to have customary courts of their own; the *tribunaux de centre*, which are also 'created' courts providing for the needs of the mixed native populations in locations,¹ &c.; and finally the *tribunaux de territoire*.

¹ See Chap. IX, p. 525.

The last are presided over by an administrator, and composed of judges nominated from the *chefferie* or other courts, and are mainly intended to act as revisionary courts. The jurisdiction of all these courts is equal in scope and follows the native practice in making no distinction between civil and criminal cases; but the criminal jurisdiction of native courts is confined to cases in which custom provides a penalty. Their competence is limited to imprisonment not exceeding two months and whipping where custom admits of it; all offences provided for under the written law involving punishment exceeding these powers must come before the courts with European personnel. The general tendency at present is to emphasize the civil rather than the criminal aspect of the work of native tribunals.

Revision on facts lies with the Territorial Court, over which an Administrator presides; but supervision of the work of the native courts lies with the *Parquet*, which has certain administrative powers over the courts and sees their records. It can annul their decision on grounds of law, or order retrial. It is charged with their inspection; but the possibilities of inspection are limited. In 1935 the four types of native courts gave 24,056 judgements, of which only 17 were upset by the *Parquet*; the *tribunaux de police* gave 17,112 judgements.

In Ruanda-Urundi two grades of native courts are recognized, the *tribunaux de chefferie* and *tribunaux régionaux*. Supervision of their work lies not with the judiciary but with the local administrative official, who may attend any native court and advise the judge, may review any sentence on appeal or on his own initiative, and is required to quash any sentence which is contrary to public morals.

IV. PROBLEMS ARISING IN REGARD TO THE ADMINISTRATION OF JUSTICE

The difficulty of reconciling European and African ideas on law and justice has prompted some thinkers to suggest that the question should be approached from a view radically different from that which has hitherto held the field. The difficulty of reconciliation has a double origin: the difference in the conception of law, and the difficulty of adjusting its machinery.

As to the former, that there is a great dissimilarity of approach

is obvious enough, though this may be due as much to present cultural conditions as to any radical difference of mentality. It may be said that, in regard to the criminal law, while the African can readily accept punishment by the state for the more usual offences against persons or property which are reprehensible in both European and his own eyes, he is a stranger to the idea that it is necessary for society to regulate behaviour through the wide use of police regulations and penal laws, such as tax, pass, or labour laws; on the civil side, the African's inexperience of all the contractual relations, involved in commercial transactions based on money economy, have made him a stranger to the legal methods in which a modern individualistic and industrialized society has expressed its needs. How far is it possible to adjust European conceptions of law and justice to these conditions of mind? The answer does not lie in any change in the law; it depends on the extent to which administrations are determined to impress their own conceptions of behaviour on Africa.

We must be clear, in the first place, whether there does in fact exist a field in which the lawgiver could make wider concessions to African concepts. It is not, for instance, possible to find any compromise on certain questions, such as trial by ordeal or the elimination of persons who commit, even involuntarily, an offence against religion; nor is it possible to suggest that administrations should deprive themselves of the power to implement their administrative ordinances (such as those regulating health conditions, preservation of forests, and the like) by attaching penal clauses to them. Even on the subject of witchcraft, the outstanding problem of the lawgiver in Africa, the main principles seem clear, though further consideration might produce some change in the form the law should take. There is evidence that the operations of both protective and harmful witchcraft are continually in the native mind, and although the spiritual force of African religion may be diminished by contact with European influences, belief in witchcraft and magic persists¹ in the urban and industrial areas as well as in rural districts, and an element of fear of occult forces is to be found in much of the litigation by Africans. It is usual for legislation to prevent native courts from judging

¹ D. Westermann, *Africa and Christianity*, 1937, p. 133.

cases in which this element is apparent, and the practice of magic is expressly forbidden by a variety of laws which have not escaped criticism on the ground of their lack of discrimination and their wide divergence in definition and provision of punishments. The Nigerian law is, for example, mainly directed against ordeals, and persons who represent themselves as sorcerers, or who possess charms, are punishable by six months' imprisonment, while in Northern Rhodesia witch-doctors are liable to seven years' imprisonment; in Kenya a milder law does not mention witch-doctors, but reserves its severities for cases where the claim to supernatural powers has some evil purpose; but in Uganda a witch-doctor is punishable with five years' imprisonment. The intentions of these laws, reflecting an attitude which regards magic and witchcraft as a form of fraud, are not readily understood by people of whom large numbers regard the operations of magic as normal events of everyday life.¹ Some of the laws reflect the sentiments of a period when native institutions had received a less discriminating study than has been given to them of late years, and it has frequently been necessary for the executive to exercise its discretion in order to reduce judicial sentences involved by the strict application of the law. It would seem reasonable that the existing legislation on the subject should now be reviewed, with the purpose of bringing under the penal law only that use of wizardry or magic which has, or is intended to have, harmful consequences.

These considerations apply also in part to the field of civil law; it would not be to the interest of Africa to refrain from making that gradual advance towards individualization of property in land which may lead to improvement in production.² Africa is no longer divided between Europeans and primitives; the law must be such as is suitable also to the rapidly increasing population which has ceased to be primitive but is not fully europeanized. There is no clear-cut solution of the difficulties arising out of the divergence of European and African conceptions of law; all that is possible is to secure the utmost acceptance for the law by the fullest discussion before it is made, and by a careful study in advance of its probable reactions on African society.

¹ See *Africa*, vol. iii, no. 4, 1935.

² See Chap. XII, pp. 850 ff.

On the other hand, the machinery of the courts seems to offer a field in which readjustment may well be considered, and is indeed the more necessary because, as has already been observed, the procedure of judicial administration is a more important factor in earning respect for the law than the substance of the law itself. The formal court presided over by a specially trained magistracy is an alien idea to most Africans. The legal or customary affairs of the individual or the group are usually discussed and settled in the same places as other affairs and by the same persons. Except in the courts of the larger states in Nigeria and in some urban areas, native courts are still held in simple buildings to which a large number of the public have access, or in shelters open at the sides, or even in the open air. The accused sits with the complainant before the audience and a judge or judges who know his own language, his family, and the circumstances of his life. The complainant tells a story unrestrained by European rules of evidence, and the accused interjects questions, comments, and objections; his own evidence is similarly given. The type of direct perjury, so frequently experienced by European courts trying native cases, is less likely in a court where the parties are surrounded by an interested audience of friends and relatives, and where the court is in a position to check, by the application of rudimentary rules of evidence understood and accepted by the parties, irrelevance or deviations from the truth as the story is unfolded to it. Judgement is frequently delivered after what is tantamount to a general discussion in court, and possibly after a more restricted discussion between members of the court, the court clerk, or elders who are trusted friends of the presiding chief. As the court is not a court of record, proceedings are not hampered by the necessity of a written report of the evidence. The usual practice is for the court clerk or scribe, a man often of little book-learning but of considerable importance and influence where judges are illiterate, to enter the names of the parties and short descriptions of the nature of the case and the judgement given. The knowledge that this record will at some future date be read by the supervising administrative officer has in many cases a restraining influence on the court.

This procedure may be contrasted with that of the European

court, where evidence is given according to rule and is conveyed to the magistrate through an interpreter; linguistic difficulties, often very great, the restrictions on free discussion, the lack of contact with the presiding magistrate, and even the need for standing in the box may well give the accused a feeling of helplessness and oppression not always relieved by the fairness of the judgement. The rules of admissible evidence must often seem to the African to have been designed to hamper the discovery of the facts. Again, statements made in evidence acquire a special status through being made under oath, but the court cannot avail itself of those forms of oath which have special force in Africa. Native courts, following customary procedure, often place great reliance on certain oaths or observances of a similar nature; for instance, a native court may permit a litigant to challenge his opponent to testify to the truth of his statements by eating food over the grave of a common ancestor of the two parties, and the answer to the challenge would be treated as decisive of the issues involved.

The difficulties of the situation are obvious, and the administrations have in more than one instance found it necessary to attempt some means of establishing a closer contact between the law and the people. In serious cases such as homicide and in High Court cases, where the accused may be confused by elaborate procedure and ceremonial and by the process of police inquiry and preliminary examination before a magistrate, administrations frequently provide not only counsel for the defence, but also a European, usually a District Officer, with a knowledge of the language and customs of the accused, to act as an advisor to the counsel and a friend to the accused. In the courts presided over by the administrative officer in his judicial capacity, procedure is sometimes modified to suit native custom; but here again the difficulty arises that these are also courts of record in which evidence must be taken according to prescribed rules; again, especially in civil cases, as knowledge of native custom has often to be acquired by evidence taken as the case proceeds, questioning regarding points that are common knowledge to a native court also creates a restricting atmosphere; the African is said to speak freely about some of the matters arising out of native custom, but is reserved and confused when asked for explanations of certain

usages or courses of action, either because the inner meaning is not clear to him, or is connected with religious or intimate matters which he hesitates to discuss.

The fear of a tendency towards technicality has been largely responsible for the exclusion of professional pleaders¹ from certain classes of actions in the courts of administrative officers and sometimes also from magistrates' courts presided over by junior members of the High Court cadres. There are other reasons which support this policy. The expense of litigation in which professional pleaders were employed would normally be heavier than Africans ought to be allowed to incur. Professional advocates would, in Africa, usually be so superior to their clients in their legal knowledge and forensic powers, that they would be likely to establish an ascendancy over clients which would open the way to abuses. As the accused person has no legal adviser, the duty of explaining to him what are his rights under the procedure of the court rests upon the presiding magistrate. In some instances an administrative officer may suggest to the accused what witnesses he should call, and even how he should conduct his case, but normally the responsibility of acting as prisoner's friend rests with the presiding magistrate, who assists the defence in questioning witnesses.

Though, however, some steps have been taken to meet the difficulties above referred to, the main problem still remains. There are many who feel, not without reason, that the growth of a technical procedure, inevitable where a machinery based on European practice has once been introduced, offends against the prescription of the earlier Orders in Council referred to on page 274, and they remark the obvious difficulty which courts experience in setting aside their rule of procedure in order to secure substantial justice.

It is possible that the existing procedure does in substance secure some greater measure of justice than the criticisms made would suggest; it is possible also that here, as also in other countries where European legal procedure has been applied, the native, faced by a system which he does not comprehend and which presents to his mind great disadvantages, nevertheless gives it a certain

¹ e.g. Nigeria, *Laws*, cap. 4: see also Protectorate Courts Ordinance, no. 45 of 1933.

measure of acceptance because he appreciates that its intention is to secure an impersonal and impartial method of trial. But at the same time there are few problems which demand more careful study than that of an effective adjustment of existing judicial methods to meet the needs of the African native. It is regrettable that the subject has not been brought under any comprehensive inquiry by the governments concerned. In the Union, commissions such as the Cape Native Laws and Customs Commission of 1883 dealt at some length with the general legal position in regard to natives, but no specific inquiry has been made on the administration of justice, and the Native Economic Commission of 1930-2 made only the reference to native courts which has already been quoted.¹ The working of the criminal judicial system in East Africa was examined in 1932-3 by the Commission presided over by Sir G. Bushe,² and there is much valuable material in its proceedings and in the opinions recorded. Its scope, however, included only criminal justice and excluded the native courts. Moreover, it judged of the adequacy of the present arrangements largely in relation to their approach to the ideal which it seems to envisage, namely, the trial of all serious crime by an extended cadre of High Court judges, leaving preliminary investigations and the disposal of minor charges to magistrates who would, as far as possible, be professional in origin.

This attitude, and in particular the preference expressed for professional magistrates, aroused a controversy which attracted undue attention to what was in truth only one part of a much larger problem. The question of the separation of judicial and administrative functions in the magistracy was not a new one in Africa. It had been discussed in the Union by critics of the native policy, though here the case was somewhat exceptional, in that magistrates were under the control of ministers who might be assumed to be more directly subjected to political pressure than the heads of colonial administrations; the only colonial analogy was Kenya, where one class of crime (stock theft) was described at one time as having assumed the proportion of a major political

¹ See above, p. 284.

² *Report of the Commission of Inquiry into the Administration of Justice in Kenya, Uganda, and the Tanganyika Territory*, Cmd. 4623, 1934.

issue.¹ Something has already been said of the Belgian attempt to rely predominantly on professional justice, and its issue.² The decision of the British government on the report of the Commission disclaimed the elimination of the magisterial functions of administrative officers even as an ultimate objective, and expressed its appreciation of the value of the local knowledge and experience of administrative officers in deciding such questions as motive, extenuation, or credibility of evidence. Nevertheless the Colonial Office appears to have followed in East Africa the policy of increasing gradually the number of officers discharging purely magisterial functions, though the personnel is not always of 'professional' origin.³ In Nigeria a more decisive step was taken in 1933 which was definitely stated to be in pursuance of the policy that, as far as practicable, judicial functions should not be discharged by administrative officers.⁴ The situation in Nigeria had admittedly been different from that of East Africa, for in the former the provincial court system had placed extensive criminal powers in the Residents' courts, subject to confirmation of sentences of over six months by the Governor, or, in the case of death sentences, by the Chief Justice. In Ashanti and the Northern Territories of the Gold Coast the Chief Commissioners' courts had had somewhat similar powers. The change introduced in 1933⁵ brought Nigerian practice more nearly into line with that obtaining elsewhere, by substituting circuit judges for the Residents' courts, but went further, in so far as it extended the number and scope of work of non-administrative magistrates. It was a further departure when these magistrates were made the appellate authority for certain classes of native courts. There has thus been an effective extension of 'professional' justice; though the effects of the measure are obscured by the fact that judicial posts have so far been in many cases filled by officers of previous administrative experience.

There is as yet no common agreement on the question of prin-

¹ Ibid., p. 17.

² See above, pp. 291-2.

³ In Kenya there are nine posts for these Resident Magistrates, in Tanganyika seven, and in Northern Rhodesia four.

⁴ *Objects and Reasons*, Ordinance 45 of 1933, Nigeria.

⁵ Nigeria Native Courts Ordinance, no. 44 of 1933.

ciple, and there is not yet sufficient experience to judge of the results achieved. Any consideration of the question must, however, take account of the low economic standards of Africa, which make it necessary to keep the expense of the judicial cadre within those limits which the people can afford. Even if the whole of the personnel of the courts were of the 'professional' type, a wide sphere of judicial work would remain with the administrative staff in their relation to the native courts.

On the remaining recommendations made by the Commission for improving the work of the courts there is a larger measure of agreement; but as already suggested, the whole subject of the working of the courts seems to be one which requires more extended study on a much wider basis, which would take into full consideration the feasibility of adjusting the machinery so as to secure greater respect for the law from the African. A study on this scale would inevitably have to embrace the question of the employment of Africans in the judiciary: but it is of even greater importance that it should embrace a study of the native court system, for it is in the extension of that system that many find a promise of the solution of the problem.

There are already areas in which native tribunals dispose of case work which in quantity far exceeds that of the courts with European personnel.¹ Their efficiency rests on two factors; the first, the recognition they can obtain from Africans as an institution which has its basis in their own traditions; the second, the quality of the guidance they obtain from the supervisory authorities. As to the first point, the success of the native tribunal rests on the same foundation as that of the native administrative institutions; where success has been attained, it has generally been related to the use made of customary rather than of created authority.² Perhaps the most recent proof of this is the new position taken by the native courts in south-eastern Nigeria as the result of the substitution of traditional authorities for 'warrant chiefs'. It is probable that where (as in Kenya) the courts have been constituted on a method which neglects the tribal basis, the administration would

¹ In 1937 Native courts in Tanganyika dealt with 82,131 cases; courts with European personnel dealt with 15,889. *Report on Tanganyika Territory for 1937*, p. 17.

² See Chap. IX, pp. 527 ff.

have preferred to adopt this basis, were it possible now to recreate it. One almost universal result of adopting the tribal or clan basis is that the judicial authority is identical with the executive. African society is still at that stage of development when there is no clear distinction between the two; and any discussion of the desirability of separating them would be academic, since as a rule no separate personnel could be found for the judiciary which would have the necessary traditional authority. The Alkali courts of Northern Nigeria are quoted as an instance of separation; but the Emir's court still retains its judicial functions in certain classes of cases.

Although traditional conditions prevail to a great extent in native courts, they are being modified by the creation of the simple machinery for recording cases and arresting offenders, and by the demands made on the court by changing conditions. Familiarity with the procedure of European courts often brings a European atmosphere into the native courts, which is not always to the disadvantage of the plaintiff or defendant who, in areas where courts are a recent innovation, has already become accustomed to the more rapid methods of European courts. Again, the differentiation between criminal and civil offences is becoming more defined, partly owing to the advice and influence of the administrative officer, but more frequently owing to the nature of the rules made by native authorities and enforced in the courts. These introduce a type of petty criminal offence, such as a breach of some general regulation regarding road-making, erosion, or health, hitherto unknown to tribal courts; also courts are in many cases required to take cases arising out of breaches of the statutory law of the territory or the penal code. In old times the types of cases heard before the chief's or tribal court were limited to sexual and agricultural affairs, inheritances, witchcraft, and other matters which often concerned a narrow circle only, and were ruled by well-known conventions and hardly affected by circumstances outside the tribal control. To-day native society is more complicated and feels itself dependent on an alien rule and on economic and social conditions over which it has no control. The native authority and the native court have become increasingly concerned with the problems arising out of the impact of the new conditions on tribal society.

Will not the extension of native court jurisdiction to include

purely 'statutory' offences, which find no condemnation in native law and custom, tend to deprive the tribunals of the support they might otherwise receive from African opinion? Policy varies in this respect. It was natural enough that the Moslem courts of the emirates should be given a very wide jurisdiction; but there have been those who hesitated to place on the normal tribal or clan court the burden of dealing with statutory offences which are not accepted by the tribe as part of its own code of behaviour.¹ The Belgian policy has been marked by the same feeling: speaking of the native courts M. Sohier emphasizes that, although they are given a competence in criminal matters, this is a small part of their functions, which are primarily to allow that 'les affaires civiles, patrimoniales ou personnelles, des noirs, puissent être réglées d'une façon adaptée à la fois à la société indigène et à l'occupation européenne'.² On the other hand the policy in some British areas, such as Tanganyika Territory, has led to a very wide extension of jurisdiction of this type.

There is a further problem in adapting the native court system to the needs of mixed native populations in the towns, or native locations of mining centres.³ The legal problem is one of great difficulty. It is not to be solved by merely applying 'European' law to such areas, nor by placing them under customary local tribunals; it is indeed difficult to justify the action of some administrations who, faced with the problem of these mixed populations, have simply brought them (theoretically at least) under the jurisdiction of the nearest native court. Reference has already been made to courts of the type of the Native Subordinate Court of Tanganyika Territory and Kenya⁴ or the *centre extra-coutumier* courts of the Belgian Congo,⁵ whose function is to provide for Africans who are not yet europeanized, but are out of their tribal setting. The extent to which such courts are needed, and the procedure to be applied in them, provide problems which will grow with the expansion of industrial or urban conditions. The problem will be the more urgent because the urban population will tend to come

¹ G. G. Brown and A. McD. B. Hutt, *Anthropology in Action*, 1935, p. 22.

² 'Les juridictions indigènes congolaises', *Bulletin des Séances*, Institut Royal Colonial Belge, vi, 1935, part 1, p. 57.

³ See Chap. IX, pp. 496 ff.

⁴ See above, p. 289.

⁵ See above, p. 293.

before the tribunals more frequently than Africans living under less complicated conditions in the rural areas; also they have not all the extra-judicial agencies for arbitration and the like which tribal and clan relations afford. Possibly the solution will be found in the wide extension of the system of subordinate magistrates' courts officered by Africans; and it may even be that in their efforts to adapt tribal custom to the cases which come before them we may see in time the evolution of a type of Bantu natural law (an African *jus gentium*), which may make a new starting-point for the amalgamation of African and European law.

The second factor determining the efficiency of the native court system has been described as the quality of the guidance exercised by supervisory authorities. The crucial importance of supervision, and the difficulty of its exercise by a small administrative staff, have possibly weighed as strongly as any theory of direct rule in turning French policy against the institution of native courts on the British model. The French would perhaps admit that their system, which means that there is no court where there is not a European available to preside over it, makes but small provision for the judicial needs of a large and scattered population; but they would claim, on the other hand, that such cases as come to trial are decided by an agency in which they can have confidence. The Belgian system is admittedly in its experimental stage, but at the moment it falls between two policies. It has created a true native court, but emphasizes its essentially civil functions, while the system by which the professional magistrate rather than the administrator becomes the revisionary authority for the native courts restricts the possible scope of supervision.

The British system gives a wide jurisdiction to the native court, but from the first has put emphasis on supervision and has placed that function primarily in the hands of the administrative staff. Supervision has two elements. First, the inspection of records, and the consequent exercise of powers of revision, or of transfer to trial in the revising officer's own court, either on application from a dissatisfied party or on his own motion; secondly, the use of the formal power of appeal. The former is, in most areas, by far the more important process. There is the widest diversity in the measure of contact achieved in different territories between the

administrative officer and the native courts. There are many areas in which native courts are carefully supervised by administrative officers, who read the records of all cases and discuss with the personnel of the court every point which is not clear. In Bechuana-land, for example, the Native Tribunals Proclamation of 1934 provides that court records must be examined every three months. There are other areas in which, owing to the nature of the country or lack of staff, supervision is of a far lower quality. In the Gold Coast, where the inefficiency of many of the native courts was for long notorious, a strong lead has been given to supervising officers by a declaration of the Governor that it is not the duty of government to bolster up corrupt and inefficient tribunals,¹ and Ordinance no. 18 of 1935 has now made native tribunals directly subject to inspection and revision by administrative officers.

There is an equal divergence in the method of recording native court proceedings; in some areas the fear of the influence which may be exercised by court clerks has restricted the record to a bare entry of the decision; the usual practice in East Africa is for the record to consist of the names of the parties, and short statements of the claim, or offence, and the decision; in other areas all the evidence is meticulously recorded, read over, and attested. Revision is in some cases a complete retrial (and indeed this is necessary where there is no adequate record); in others it takes place on a review of the recorded proceedings.

There is also great diversity in practice regarding appeal. In the West African colonies and, as we have seen, to some extent in East Africa, though the greater number of appeals is still to the administrative staff, systems whereby appeals may be made to the High Court have brought the native court more directly into touch with the High Court system.² Recent years have seen a gradual development of the native courts of appeal, constituted either by giving appellate powers to higher grade courts (as for instance the Lukiko³ court in Uganda or some of the chiefs' courts in the Lake

¹ *Address by the Governor at the opening of the 1933-4 Session of the Legislative Council*, p. 13.

² In the Gold Coast there is provision for appeal from the native courts to the magistrates' courts, thence in civil matters to the Chief Commissioner's court, and in criminal cases to the Divisional court, and finally to the West African Court of Appeal. (Northern Territories, Ordinance no. 31 of 1935; Ashanti Ordinance no. 21 of 1935.)

³ See Chap. IX, p. 444.

Province of Tanganyika), or by bringing together in a territorial court the representatives of tribal or clan courts. This system has its value since it tends to keep litigation within the range of the native court system, and avoids too early a contact between two different types of court.

It is perhaps only a minor point that the system allows to a litigant a double course of action; he may either carry his appeal to a final native court or take his chance of an informal application to the administrator for revision. The coexistence of revision and appeal, however, has advantages. Where native courts are beginning to take new classes of cases, for instance breaches of new native authority rules regarding forest preservation, the eradication of weeds, or the burning of dead cotton plants, intervention by the revising officer may constantly be needed. The same officer, however, might well hesitate to interfere with the decision of the court in such a matter as the return of dowry when a wife has run away from her husband, and in such a case appeal to the superior native court is the more natural course for an aggrieved party.

It is inevitable that the evolution of judicial systems in different areas should involve a great measure of diversity in practice; and clearly elasticity is an advantage during a formative period. But the native court system as viewed in different territories presents a diversity of practice which in part at least must grow from a diversity of views, and some study of principle might at this stage be of advantage. There are other matters which, if they appear to be primarily of juristic interest, are none the less of more than academic importance. Is it possible to create, out of the different elements which now make up the body of law in any one territory, a homogeneous body of law which shall serve adequately the needs of the whole population? That population, as already pointed out, has three main components: the section completely detached from tribal life; the urban and industrial populations still attached to their native traditions and customs; and the great majority of Africans in the tribal or native areas. French and Belgian policy pointed originally towards a single system on a European model to which the African would be expected to adapt himself with the progress of civilization. This may still be in some sense the ideal, but practice in the French and Belgian colonies tends to depart

from it. The statutory law, it is true, remains predominant, and the judicial system is such that, while native law is recognized, it is continually being influenced and moulded by European concepts. In effect a kind of dualism is being established, and there does not seem any clear view as to the lengths to which this process should now go, or how it should be guided. The British, always less definite in objective, have characteristically given first place to what appeared to them to be the needs of African society, and provided the mechanism for this in an extended use of purely native tribunals. There are many obvious advantages in this, but the use of native tribunals does not in itself bring us nearer a solution of the problem of producing a homogeneous body of law. In fact there is not yet any clear view on the fundamental question whether a uniform law is to be achieved by a more liberal adaptation of English law to the needs of African conditions, or alternatively by a deliberate and regularized modification of the law and procedure which the native courts apply. At the moment, native law itself is undergoing its evolution in circumstances of which the effect is not perhaps always fully recognized. A kind of local law is establishing itself which varies district by district. The rules made by native authorities, often referring to matters of customary law, are given a judicial effect;¹ and administrators in the course of revision and appeal are day by day making their own case law which is of purely local scope.

More important still is the need that native law should adapt itself to the changing needs of society. There is evidence that such adaptation is in progress. Thus in some areas, where primitive laws of inheritance have proved inadequate to modern conditions, a law of testament is being recognized in the native courts, and it would be possible to give further examples of a natural growth of customary law under the pressure of changing circumstances.² It is, however, doubtful how far this adaptation has gone in the field of contractual relations, and clearly in many cases the conservatism of tribal heads has not allowed it to follow the actual course of changes in the forms of land tenure or family relationships. It has always been recognized that the union of executive and judicial authority had its own problems, in that it rendered it difficult to

¹ Cf. Chap. IX, pp. 389, 441.

² See Chap. XII, pp. 842-63.

find a place in the native court system for the younger educated man who will prevent the courts from standing too rigidly on established custom.¹ Under the present policy questions of adaptation of custom will remain outside the range of the statutory law, but they can in the long run hardly be left to the unregulated action of a great diversity of native tribunals. A comparative study of native law as it operates to-day is clearly required and its object need not necessarily be codification. It is generally agreed that the codification in Natal, with its promulgation in 1891, has tended in the absence of periodic revisions to deprive native law of that elasticity in adaptation which alone can enable it to meet the needs of a changing society.

Another result of the proposed study of the working of the native courts might be the evolution of a simple code of procedure. Some measure of formality follows automatically from the recording of cases, the appointment of clerks, the auditing of court accounts, the employment of police to make arrests, serve summonses, and execute judgements, and even from the building of court houses—which in certain instances are of European design. While anything like a rigid code of procedure would make a radical change in the native court system, it may not be possible to allow the existing diversity of procedure to continue without limit, and some simple rules of procedure will clearly be required.

V. PUNISHMENTS

Many have felt that the difficulty of securing respect from Africans for European systems of justice is increased by the apparent unsuitability of European ideas of penology to African conditions. The African method of dealing with offenders included no retributive action. The repair of damage done, with social and spiritual penalties to correspond, comprised the main punishments available, save when in exceptional cases an offender against the welfare of society (either intentional or unintentional) was ostracized or had to be eliminated. The use of imprisonment as a punishment was practically unknown. There are some who feel a doubt as to the deterrent value even of a long term of imprison-

¹ See *Report on Higher Education in East Africa*, Colonial 142, 1937, p. 110.

ment; but there can be few who do not see mischief in the large numbers of short-term sentences given for statutory and similar offences. They must fail of their effect so long as they carry no social stigma, though when imprisonment involves economic hardship this may itself be a deterrent. In Uganda poll-tax and *luwalo*¹ offenders, amounting at times to 60 per cent. of the total number of prisoners, use the native administration prisons as a temporary expedient for delaying payment of tax. On the other hand there is a tendency for native courts to imitate the European courts in awarding sentences of imprisonment, possibly as an easy way out of cases in which carefully assessed compensation would be more appropriate; thus imprisonment for matrimonial offences is not infrequent. Again, a fine no doubt appears illogical to a people who have hitherto regarded compensation to the injured party, and not payment towards state finances, as the natural corrective to ill behaviour. While, however, the objections felt by many Africans to European ideas of punishment may be admitted, there is a real difficulty in finding an alternative. Though the conclusion of the Commission of 1933² that 'the punishments sanctioned by all enlightened systems of jurisprudence are the most suitable' to Africa may not cover the whole field, it is at all events clear that no one has yet presented any practical substitutes for fine or imprisonment.

There may, on the other hand, be a good case for an effort to make a closer correspondence between European views and native custom. Thus there seems to be a field for further study of the value of the probation system, particularly in tribal areas, since this might base itself on collective responsibility; some experiments have already been made in this direction in Natal and Zululand.³ In the Union of South Africa detention camps are being formed for short-term prisoners; 19,600 petty offenders were admitted to these in 1935. In East and West Africa it is usual to employ tax defaulters and petty offenders in road-making camps, and as far as possible outside prisons; prisoners are, generally speaking, classified according to length of sentence; long-sentence men go to central

¹ A customary service, now frequently commuted: see Chap. X, p. 575.

² *Report*, op. cit., Cmd. 4623, pp. 58, 97.

³ *South African Outlook*, vol. lxvi, no. 779, 1936, p. 74.

prisons; for example in Tanganyika the smaller out-station prisons retain offenders awarded less than six months' sentence, in Uganda under one year, in Nigeria under two years; prisoners are also graded as habitual or serious offenders, first offenders or adolescents; but differentiation often has no value in practice, as accommodation does not always permit of the grades of prisoners being kept apart, and those who have no criminal background are frequently required to live and work with habitual criminals. Prison buildings are often of a temporary nature, or consist of a single large cell into which all classes of offenders are shut at night: central prisons may have separate cells for a few special cases, but the usual practice is for prisoners to be shut at night into large rooms, sometimes containing as many as forty prisoners.¹ It has to be recognized, on the other side, that great psychological hardship may be involved in confining Africans in solitary cells. Treatment of the prisoners often depends on the locality in which they are convicted and not on the nature of their offences; it is found difficult to treat the same category of prisoners in an identical manner.² In some native administration jails,³ and in some local prisons under the paternal administration of a sympathetic District Officer, no doubt prison is little hardship or punishment, but it is difficult to believe that long confinement involving separation from the family and social life, which means so much to the tribal African, weighs lightly on the African prisoner. Where native administrations run their own prisons, as in Nigeria and in Uganda, conditions are very similar to those in the government local prisons, but supervision is possibly laxer. The useful employment of prison labour presents difficulties: in South Africa and Southern Rhodesia it is hired to private persons and to municipalities, as well as employed on public works; in East Africa prisoners are employed on public works such as the upkeep of aerodromes and anti-malarial work; it is usual to give industrial instruction such as carpentry, tailoring, and building, to long-term prisoners in central jails. In local prisons labour is employed on station upkeep and sanitary

¹ *Report on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, paras. 596 ff.

² Recommendation in *Report of Fifth Committee to the Assembly*, submitted to League of Nations, Sept. 1934.

³ Uganda, *Report of the Prisons Committee*, 1936, p. 5.

services; the Uganda Commission found it necessary to recommend that prisoners should not be employed for the benefit of officials or private individuals.

As regards corporal punishment, the whip of hippo-hide or similar material was an instrument with which Africans were at one time only too familiar. It was always in the hands of the slave-traders and was often employed by Europeans,¹ though even some of the earliest European travellers set themselves against its use.² Such an instrument produced an open sore at every stroke, and was capable of inflicting permanent injury. Native chiefs adopted it widely as a means of enforcing their authority, and in the early laws of most African colonies it was recognized as the instrument for the infliction of corporal punishment. The Belgian and French laws do not allow the courts presided over by Europeans to inflict whipping save as a punishment for jail offences, but the Belgian law allows native courts to inflict whipping where native custom has practised it. So far as the British territories are concerned, the use of the hide whip has been abolished.³ When the courts award a sentence of corporal punishment it is now inflicted with a light rattan cane, and a cotton cloth is spread over the buttocks. The use of the 'cat' is retained in some of the British dependencies, though not in all, for the punishment of brutal crimes of violence. The value of corporal punishment has been much canvassed.⁴ In the British colonies the general tendency has been to restrict caning to juvenile offenders, and to certain graver offences (such as violence or brutality) in the case of adults. The recent judicial reorganization in Nigeria requires the native courts to obtain confirmation from the administration (or in some cases from the Emir) before the sentence is carried out; it is noticeable that this has resulted in a great reduction in the number of punishments inflicted; in the Northern Provinces sentences of corporal punishment were 7,000 in 1933, 1,600 in 1934, and fell to 900 in 1935, but it is open

¹ C. Peters, *New Light on Dark Africa*, 1891, pp. 62-3.

² J. Thomson, *Through Masailand*, 1885, pp. 104-5.

³ See, e.g., Tanganyika Corporal Punishment Ordinance, no. 14 of 1930, and the Order made thereunder and published as Government Notice no. 74 of April 3, 1930. Nigeria, Native Courts Ordinance, no. 44 of 1933. Uganda, Order under Criminal Procedure Ordinance (*Laws*, cap. 5) published as Government Notice of March 31, 1925.

⁴ *Op. cit.*, Cmd. 4623, pp. 61-3.

to doubt whether fine or imprisonment has proved a suitable substitute. No general conclusion on the value of retaining corporal punishment is possible in face of the great diversity of conditions prevailing in Africa. There are areas where its total abolition is clearly desirable; there are others where it is obviously a more appropriate form of punishment than fines or imprisonment.

The suitable punishment of juvenile offenders presents difficulties. Magistrates are reluctant to convict a child when it means that he must go to prison, and it is doubtful whether caning is in all cases a suitable punishment, or whether the young African takes a serious view of a light rattan cane. In Southern Rhodesia and Tanganyika small reformatories exist for juvenile offenders, but reformatories which must needs be few and far between only meet the cases of the few habitual offenders. In Nigeria the Kano native administration has a juvenile prison where basket-work and gardening are taught, and the government runs an industrial school at Enugu at which some thirty boys are now undergoing treatment. The Gold Coast government subsidizes a Salvation Army boys' home, but missionary organizations do not appear to be used for this purpose elsewhere. In the Union there were 14,481 male and 2,502 female native juvenile prisoners in 1935; government has been empowered to establish reformatories, but there is no evidence that native juvenile offenders are as a general rule dealt with in separate institutions.

It is usual for separate accommodation to be provided for women prisoners; but in native administration jails in Uganda they are apparently confined in the same jail as men under the supervision of male warders. It is hardly conceivable that prison under ordinary circumstances is an appropriate form of punishment for females in native areas, and it has been suggested that in the case of short sentences they should be put in the extra-mural custody of responsible persons.¹ The absence of mental institutions, or remoteness from the few existing institutions, necessitates the retention of lunatics in prisons in most East and West African territories.

In Kenya the labour section of the administration arranges for

¹ *Report of Prisons Committee*, 1936, pp. 6, 9, 18.

the repatriation of discharged prisoners.¹ By arrangement with the authorities, the Salvation Army assists ex-convicts, but there are no special prisoners' aid societies; the usual practice is for District Commissioners to be informed of the release of first offenders so that they can afford them any necessary assistance. It has been suggested that an extension of the prison-farm system, already started in some territories, would provide an open-air life and occupation more suited to natives than incarceration in prisons of a European type, and instruction in agricultural methods which would be more useful to them on release than training in trades.

The substitution of fines for the system of compensation which was the commonest feature of African custom has doubtless been one of the changes which the African mind has found it most difficult to accept. The wide recognition of native tribunals has to some degree eased the position; it may be assumed that the French *tribunal indigène*, in which local native custom takes the place of written law, also grants compensation. But the British colonial courts have not found it easy to give to the principle of compensation the place which the African might himself assign to it. It is true that East African codes allow for compensation being given in addition to or in substitution for any other punishment,² and that magistrates are advised to use it in all suitable cases. The Supreme Court Ordinance of Nigeria³ allows a court to stay proceedings in any case falling short of felony on payment of compensation, but in practice the procedure is little used. The law does not definitely enunciate the principle of granting compensation as a substantive penalty, and the attitude of some High Courts at least shows that they tend to the unpractical view that the injured party ought to resort to civil action to get compensation. It must again be noted that there is a growing field of offences in which compensation is in any case inapplicable, namely, the breach of health, sanitary, and other administrative laws. Though there is scope for considering a change in the law which would give further recognition to compensation as a principle in the criminal procedure, yet if most of the serious crimes and all the

¹ See Chap. XI, p. 676.

² Op. cit., Cmd. 4623, pp. 63-6.

³ *Laws of Nigeria*, cap. 3.

administrative offences have to be ruled out, the use of compensation can never have so large a place in the court system as has sometimes been hoped. The use of collective punishment, which is sometimes advocated as a natural corollary to African views of collective responsibility, is recognized by British law, but only as an emergency procedure. The Transkei Spoor Law¹ was the application of executive rather than judicial process; indeed, the insistence on collective punishment must always be a function of the administration rather than the judiciary.

VI. A FINAL NOTE

In dealing with the wide range of subjects included in this chapter, it has more than once been found necessary to suggest the institution of a special study of matters of principle or practice involved. The objective of such inquiries is, however, not merely the improvement of the legal, judicial, or penological systems in a technical sense. Whether any such system can be said to rest anywhere on an entirely logical basis is doubtful; it is on the other hand obvious that we have still the opportunity in Africa of considering questions of principle and their practical application, based on the only standard which we can now regard as properly applicable, namely, the social value of the institution we are creating. The impression left on the people affected must always be the most valuable element in a decision on any method advocated. The task, therefore, is not one in which the view of the technical expert can be admitted as decisive; the most valuable assistance will be given by those who are able to take a comprehensive view of the reactions of our legal system on those for whose benefit it is intended, and its capacity to evolve an answering contribution from African society.

¹ E. H. Brookes, *op. cit.*, pp. 188 ff.

CHAPTER VIII

THE NON-EUROPEAN IMMIGRANT COMMUNITIES

THE questions to which the existence of these communities gives rise are of a different class from those dealt with in the chapter on Native Administration; they originate not from the need of suiting administrative methods to the needs of African social life, but from the complication which such communities have added to the African racial problem. It is fortunate that this added complication is limited in extent. Small immigrant communities such as that of the Syrian traders in West Africa do not create a serious problem, the more so as this particular community readily assimilates itself to European conditions. Again, the existence of an Arab community in the Eastern coastal areas presents questions which, if they require some notice, cause little real difficulty. The most conspicuous problem is in fact that arising from the existence of the Indian community in South Africa and in the British East African territories; it may be noted that the Belgian policy has tended to prevent Indian entry into the Congo, and economic conditions have not favoured the immigration of Indians into French or British West Africa. It will be necessary to devote this chapter largely to the position now occupied by the Indian community, the more so as its history has more than once been marked by acute controversy, extending beyond the limits of the African territories concerned. The Indian government, in sympathy with its own legislature, has been in a position to afford strong support to many of the claims advanced by Indians in Africa, and the fact that Britain has no constitutional control over Union policy, and has also on occasion felt constrained to support the claims of European settlers against those of the Indians in East Africa, has created one of those positions of tension between different units of the British Commonwealth of Nations for dealing with which no machinery is readily available in the constitution of the Commonwealth.

I. THE ARAB COMMUNITY

The importance of the Arab immigration belongs largely to the past. By the twelfth century Arabs had established themselves in a number of points of trading vantage as far south as the Zambesi outlets. In the seventeenth century the Arabs of Oman, in south-east Arabia, ousted the Portuguese from a number of their stations in East Africa, and thus began the connexion between Oman and Zanzibar which lasted till the nineteenth century. In 1832 the reigning Sultan of Oman transferred his court to Zanzibar and extended his authority to parts of the mainland now included in Kenya and Tanganyika. Arab activity on the mainland showed itself chiefly in the opening up of trade routes and the vigorous expansion of the slave trade, accompanied by the spread of the Islamic religion and the Swahili language.¹ On the mainland the Arabs are to-day most prominent in Kenya, where the 1931 census recorded 12,166 Arab residents. Their position has been recognized by the nomination of an Arab to the legislative council, and the institution of separate Arab schools.² Both here and in Tanganyika their special form of land tenure has been recognized by government,³ and they have for the most part been brought under the jurisdiction of non-tribal courts.⁴ But the Arab has neither the political flair nor the aptitude for trade possessed by the Indian; unlike the latter, therefore, he seldom exhibits himself as a political or economic competitor to the European. Indeed, the readiness shown by less wealthy Arabs to assimilate with the Bantu seems to show that the Arabs are likely to occupy in the future a position of decreasing importance as a distinctive community.

II. THE INDIAN COMMUNITY

(a) *Historical*

There has been intercourse between India and Africa throughout history. A Roman hand-book to the navigation of the Indian Ocean mentions that trade in various commodities was then being carried on between East Africa and Kathiawar and Cutch on the

¹ See Chap. III, pp. 89-90.

³ Chap. XII, p. 848.

² Chap. VI, p. 165.

⁴ Chap. IX, p. 518.

west coast of India, and Marco Polo, in the thirteenth century, tells of 'the ships of Maabar which visit this island of Madeigascar and that other of Zanghibar'. When the Portuguese reached East Africa in the late fifteenth century, Indian traders were already there, and it was an Indian who piloted Vasco da Gama on his first voyage across the Indian Ocean. This Indian commercial community continued to prosper in Zanzibar throughout the seventeenth and eighteenth centuries, under both Portuguese and Arab rule; Captain Smee, who visited Zanzibar in 1811, reported that it then engrossed the greatest part of the trade. In 1861 Zanzibar came under British influence; a British Consul and Political Agent was appointed and British subjects came under the jurisdiction of a consular court administering Indian law, with an appeal to the High Court of Bombay. In 1863 there were 5,000 or 6,000 Indians in the island and on the mainland territories of the Sultan, and almost the entire trade of these territories, estimated at more than £1,500,000 annually, passed through their hands. These Indians were Mohammedans from Cutch, Surat, and Bombay, most of whom were permanently settled, and Hindu Banyas from Cutch and Jamnagar, who generally returned to India.

In view of this long historical connexion, it is not surprising that Indians emigrated in large numbers to Africa when the development of sea transport stimulated colonization, and large areas of Africa came under British rule. To-day there are large Indian communities in South Africa, Kenya, Uganda, Tanganyika, Zanzibar, and Portuguese East Africa. In smaller numbers Indians are to be found trading in the Rhodesias, Nyasaland, and in British Somaliland. It is proposed to deal here with the position of the Indian community in South Africa, Kenya, Tanganyika, and Uganda.

(b) *Indians in South Africa*

The attitude of the early Dutch settlers in South Africa towards racial questions is simply stated in a petition against Asiatic immigration addressed to the Republican government of the Transvaal in 1884. 'Our constitution', said the petitioners, 'recognizes only two races of men, white and coloured.'¹ It is clear that

¹ *Cambridge History of the British Empire*, vol. viii, 1936, p. 551.

both the English and the Dutch colonists, faced inevitably with a difficult native problem, regarded the Indian immigrant as a further and embarrassing complication. The Indian possessed a distinct and vigorous civilization of his own and he represented the danger of a limitless influx of Asiatics. He was a keen trader, with whom few Europeans could compete because of his lower standard of living. His sanitary standards were ordinarily below those of Europeans. From these elements there grew up a marked hostility against Indian immigrants, from which gradually developed a structure of political, economic, and social ostracism, designed to curtail the number of Indians in the country.

There were, however, circumstances which at all events in one territory of South Africa made the employment of immigrant Indians an economic necessity. The early planters in Natal experienced great difficulty in securing labour.¹ Africans were unused to employment for wages and the administration did not favour the employment of natives for wages; but labour was essential and India, which was then supplying labour to many colonial territories under the indenture system, was the obvious source from which to obtain it. In 1860 the Crown Colony government in Natal introduced the first Indian indentured labourers, although even at that time there seems to have been some opposition from Europeans other than the planters. These labourers proved satisfactory, and once the supply had begun the prosperity of the sugar plantations became dependent upon it. Immigration was suspended between 1866 and 1874, but the planters secured its renewal in the latter year, and the Natal government agreed to subsidize the government of India in respect of recruiting arrangements by £10,000 a year; from that time the introduction of indentured labour continued uninterrupted until 1911.² The right of recruitment was withdrawn in that year by the Indian government, which was moved to this step by the growing strength of opinion in India on the subject of the treatment of Indians in South Africa.

The indentured labourers were recruited by agents in India under agreements to serve on terms approved by the government

¹ See Chap. XI, p. 638.

² *Cambridge History*, op. cit., pp. 549-50.

of India for a period of five years. Thereafter their freedom was resumed and they could either enlist for a further term of indentured service, or return to India, or remain as free settlers in Africa. As the number of ex-indentured labourers who remained as free settlers increased, the opposition of the European population became intensified. In 1891 the Natal government ceased to make grants of land to ex-indentured labourers who stayed in the country, and sought, though without success, permission to recruit on terms which would allow compulsory repatriation. In 1893 Natal attained responsible government, and the objections of the European population immediately found expression in measures designed to discourage the settlement of Indian labourers. By an Act of 1895 every ex-indentured labourer who remained in Natal was required to take out each year a licence at a fee of £3.¹ Free passages to India were granted to those who returned immediately. Traders were required to obtain licences from the local authorities, and this requirement was used to restrict the number of Asiatic traders. In spite of these measures, however, a large proportion of ex-indentured Indians remained, and in 1903 pressure was intensified by the imposition of a £3 tax on the children of ex-indentured Indians on attaining the age of majority (which was 16 in the case of boys and 13 in the case of girls), a step which was described by the Indian Inquiry Commission² of 1914 as 'very drastic legislation'.

In addition to indentured immigration there was a constant flow of unassisted immigration from India and from East Africa. The hostility of the white population to this free immigration found violent expression in a demonstration at Durban in 1896, when a then obscure Indian lawyer named Gandhi narrowly escaped with his life. In 1897 the first measure limiting Indian immigration was enacted in Natal, by which all free immigrants were required to pass a language test in a European language.³

In other parts of South Africa opposition was directed against the Indian as trader, not as labourer. There was no restriction on the entry of Indians to the Cape Province, but the Orange Free State debarred all Asiatics from trading or farming in its

¹ *Cambridge History*, op. cit., p. 550.

² *Report*, Cmd. 7265, 1914, p. 27.

³ Act 1 of 1897.

territory.¹ In the Transvaal, as early as 1884 the Republican government received a series of petitions protesting against Asiatic immigration. As a result a comprehensive measure, Law 3 of 1885, was enacted. This law deprived Asiatics of citizenship and the right to own property, and required all Asiatics wishing to trade in the Transvaal to register, in the case of new entrants, at a charge of £3. It also empowered the government, for sanitary purposes, to set aside streets, wards, and locations for the habitation of Asiatics. This law introduced for the first time the principle of segregation which later became the chief demand of European opinion, but its provisions were never fully enforced by the Transvaal Republic. During and after the War of 1899-1902 there was a continued influx of Indians into the Transvaal.

Although the British government had protested to the Transvaal Republic against the imposition of disabilities upon its Indian subjects solely on grounds of race, the new British administration was forced by pressure of opinion to keep in being the Law of 1885. Moreover, when responsible government was set up in the Transvaal, it at once gave expression to local feeling on the Indian question. A European language test was imposed on all immigrants in 1907, and the Act included also a clause which had the effect of excluding all Indians seeking to enter the province for the first time. In order to prevent illicit immigration, all Indians claiming domicile in the Transvaal, and not as under the Law of 1885 those wishing to trade only, were required to register and to record their finger-prints.² These measures were the occasion of the first passive resistance campaign under Mr. Gandhi's leadership. The main grievances advanced were that the taking of finger-prints implied a criminal status, and that the immigration law excluded Indians, although British subjects, solely on grounds of race; but the movement was also a reaction against the prevailing attitude of Europeans in the Transvaal towards even educated Indians, as expressed in various forms of social discrimination in public places. The resistance took the form of refusal to register, and of deliberate breaches of the immigration law. Hundreds of Indians went to jail, and sympathy was aroused in India and in

¹ *Wetboek van den Oranje Vrijstaat*, 1891, Hof Hoofdstuk xxxiii, pp. 262 ff.

² Asiatic Law Amendment Act, 1907.

the United Kingdom, while grave embarrassment was caused to the administration. A settlement was ultimately reached by the government agreeing to exclude Indians by administrative regulations under a law which in form was applicable to all immigrants, and to insert provisions which would allow the admission of a strictly limited number of educated Indians each year.

With the formation of the Union in 1910 the immigration question passed into the hands of the central government, and in 1913 a general Immigration Act was passed.¹ This Act, in addition to the imposition of a European language test, enabled the Minister for the Interior to exclude any person or class of persons deemed on 'economic grounds or because of their standard and habits of life' to be unsuited to the needs of the Union. Under this provision all further Indian immigration was prohibited except for a strictly limited number of educated Indians annually, and the wives and children of Indians already domiciled in South Africa. The Act also prohibited the inter-provincial movement of Indians within the Union, except in the case of Indians already lawfully entitled to reside in any province at the date the Act was passed. Such Indians would be permitted to enter Natal and the Cape if they were able to pass the simpler language test prescribed under the provincial immigration Acts.

The passage of this Act led to an intensified campaign of civil disobedience, again under Mr. Gandhi's leadership. It was contended that the Act deprived Indians of free entry into the Cape Province, and that Indians working under indenture in Natal would lose their right to remain in the country as free settlers on conclusion of their service, and be liable to deportation. In addition, a judgement of the Supreme Court had laid down that marriages celebrated under the tenets of an Indian religion permitting polygamy were not valid in law in South Africa, even though the marriage were in fact monogamous. From this it appeared to follow that the wives of Indians could not be legally admitted under the new immigration law. The passive resistance campaign took the form of strikes by indentured labourers, and of wholesale breaches of the Transvaal immigration laws. Disturbances occurred in which lives were lost. Strong feeling was aroused in

¹ Immigrants Regulation Act, 1913.

India by allegations of ill-treatment of Indians arrested for such activities, and, mainly as a result of a suggestion of the Indian government, the Union government appointed a commission to examine the causes of the passive resistance campaign. This reported that the great majority of the Indian grievances were well founded. It proposed the abolition of the £3 tax in Natal, and changes of the law to meet the main grievances of the Indian community. It also recommended that machinery should be created for validating Indian marriages within the Union. Effect was given to these recommendations in their entirety in the Indians Relief Act of 1914. This Act also gave power to the Union government to repatriate voluntarily any Indians who, by a period of free residence, had lost their right to a passage under their indenture. As a result of this measure and of an agreement reached between General Smuts and Mr. Gandhi on certain administrative matters, the passive resistance movement came to an end.

The Immigration Act of 1913 terminated the entry of Indians into South Africa in any appreciable numbers. It was hoped that once the European population were assured that they were safe from any further large influx of Indians, their attitude towards the domiciled Indian would be modified. In the period following the War circumstances unfortunately produced the opposite effect. Industrial and trade depression restricted the available employment. During the War, Indians had increased in numbers in various industrial occupations, and their presence was regarded as an encroachment on the means of livelihood of the poorer sections of the white population. Some members of the Indian community in Natal and the Transvaal had become men of considerable wealth, and an outcry arose against Indian 'encroachment' in the sphere of property also. Between 1919 and 1925 measures were passed which further restricted the ability of Indians to acquire property, and a demand arose for the strict application to Indians of that policy of compulsory segregation, to which South Africa had begun to attach increasing importance as a solution of its racial problems.¹

In 1925 in response to this demand the Union government introduced the Areas Reservation and Immigration Restriction Bill, the main intention of which was to implement a policy of resi-

dential segregation. Although drafted as a measure of general application, the Bill was mainly aimed at the Indian community, as was shown by the speech of the Minister of the Interior, who, in introducing the measure, said: 'The Bill frankly starts from the supposition that the Indian as a race in this country is an alien element in the population, and that no solution of this question will be acceptable to the country, unless it results in a very considerable reduction of the Indian population.' Witnesses from the municipal authorities supported the Bill on the main ground that it was repugnant to Europeans to live in proximity with Indians, and that the occupation of premises by Indians in European areas led to depreciation of the neighbouring property and so to Indian penetration. The Durban witnesses reported difficulty in securing compliance with sanitary regulations by the Indian population and stated that nine out of ten prosecutions under the sanitary laws were against Indians. The witnesses for the Indian community and delegates from the government of India, who were permitted to give evidence, contended that the Indian trader in cheap goods was a benefit to the native and to the poorer white community, and that in so far as Indians gave trouble in sanitary matters this was due to poverty and lack of education. They appealed further to the fact that Indians had, in the great majority of cases, been brought to South Africa by the government of Natal, which needed their labour, and that, once they had legally acquired domicile, they were, as subjects of the Crown, entitled to fair treatment within the Union.

In 1927 a conference¹ was held between representatives of the Union government and the government of India, which resulted in what is known as the 'Capetown Agreement'. The Union government undertook not to proceed with the 'Areas Reservation Bill', while the government of India promised co-operation in a 'Scheme of Assisted Emigration' for South African Indians. Under this scheme free passage and a bonus of £20 were given by the Union government to every adult Indian who wished to return to his own country. The government of India undertook to assist the returned emigrants to settle in India. While the agreement recognized the right of the Union government to take steps

¹ *Official Year Book of the Union of South Africa*, 1937, pp. 1062-3.

to maintain western standards of life, it recorded their acceptance of the view that the condition of Indians domiciled in South Africa should not be allowed to drop behind that of the rest of the community. In particular the Union government promised an inquiry into Indian education, and into housing conditions in the densely populated Indian areas in and around Durban. The agreement provided for the appointment of an Agent to the government of India in South Africa, through whom the two governments would maintain touch in regard to matters affecting the Indian community. Some 15,000 Indians were repatriated under the agreement between the years 1927 and 1935. The Union government were, however, disappointed by the numbers who left the country, and in 1932, when a further conference was held, they proposed that the possibilities of an emigration scheme to other territories in the Empire should be explored.¹ It was agreed to hold such an inquiry, and on this basis the 1927 agreement was reaffirmed, and still remains in force, although no additional scheme of emigration has yet been agreed upon.

The Asiatic population in the Union in 1936,² of whom the great majority were Indians, was 219,928—less than 1/9th of the European population, and approximately 1/43rd of the whole. In 1921 the Asiatic population was 165,731.³ In fifteen years it had increased by 32·70 per cent., as compared with an increase in the European population of 31·85 per cent. The proportion of the Asiatic to the European population consequently remains substantially unchanged.⁴ A comparison of the figures of provincial distribution of the Asiatic and European population at the 1921 and 1936 census compilations shows that in Natal, where 183,646 out of the total Indian population of 219,928 reside, the European population, which was outnumbered by the Asiatic in 1921 by about 5,000, now outnumbers the Asiatic by nearly 7,000.⁵ In the Transvaal and the Cape the Asiatic population is no more than 3 per cent. and 1·3 per cent. respectively of the European com-

¹ *Official Year Book of the Union of South Africa*, 1937, pp. 1063-4.

² *Census 1936, Preliminary Report*, U.G. 50, 1936.

³ *Official Year Book*, 1937, p. 1060; 1928-9, p. 892.

⁴ The figures for 1921 and 1936 are not strictly comparable, since Syrians, who were classed as Asiatics in 1921, were classed as Europeans in 1936. The numbers involved are, however, very small.

⁵ *Official Year Book*, 1937, pp. 1046, 1060.

munity, and in the Transvaal is not entirely Indian, as there are about 2,000 Chinese.

In Natal the great majority of the Indian population are indentured labourers and their descendants. They are employed in considerable numbers on sugar and tea plantations. There are about 700 Indian sugar planters in Natal cultivating independently, but most of them are on a very small scale. Indians have also taken to small-scale farming and market gardening on an independent basis and have found employment in a great variety of industries. The census of 1921, which is the latest from which occupational statistics for the Asiatic population are at present available, showed that in Natal some 20,000 Indians were engaged in agriculture, 6,400 in industry, 3,000 in transport, and 5,700 in trade. Only 436 were engaged in professions, and 261 in public administration.¹ In the Transvaal and the Cape the majority of Indians are engaged in trade.

In the past the Indian, by providing cheap and reliable unskilled labour, played an important part in building up such industries as coal-mining, and helped to fill the gap between the European and native populations by engaging in artisan occupations. Economic changes in the Union have brought into existence a poorer class of Europeans who seek employment in the sphere of skilled and unskilled labour. The 'civilized labour policy', officially adopted by the Union government, prescribes the gradual replacement of Indian and coloured workers by Europeans in all suitable government and municipal employment.² It has been more rigidly applied by the government than by municipalities, but has resulted in a reduction in the employment of Indians by both, and has by the force of example produced similar results in private industry. On the other hand, although his opportunities have been reduced, the conditions of work of the Indian industrial labourer have improved in recent years as a result of the Industrial Conciliation Act of 1924, and the Wage Act of 1925. In several industries in Natal, Indians have since 1927 been admitted to the trade unions, which previously had been confined to Europeans. It is doubtful, however, whether this

¹ *Official Year Book*, 1937, p. 1061.

² See Chap. XI, pp. 682-9.

latter fact is to be attributed to local trade conditions, or can be taken as a proof of the existence of improved relations between the two races since the Capetown Agreement.

In trade the activity of Indians extends to all provinces except the Orange Free State, and to all classes of retail trade, from hawking to large urban stores, with branches in the country districts. The clients of the small Indian shopkeepers are chiefly natives and the poorer members of the white community, but in some towns, such as Johannesburg and Durban, there are big stores owned and managed by Indians which have substantial European custom, and in many cases employ European assistants. In the early days the Indian trader was able to take trade out of the hands of Europeans because he could trade successfully on a small margin of profit and a lesser turnover than his competitors; it was on ability to do so that he justified his claim of usefulness to the poorer section of the community, both European and native. But this trade competition contributed powerfully to the development of anti-Indian sentiment, and has been one of the real causes underlying the demand for segregation. It is not easy to determine whether the fear of Indian trade competition is less intense than it was. The evidence given before the Feetham Commission in the Transvaal in 1934 on this subject was conflicting. The chairman of the Johannesburg City Council, for example, stated that there was 'no desire on the part of Europeans in the centre of the town to eliminate Indians trading as such. I think they get on very well together.'¹ On the other hand, in some of the smaller towns of the Transvaal, such as Springs and Krugersdorf, Asiatic trade competition was said to be severely felt. If the intensity of opposition to Indian trade has lessened in some areas, it is probably the result of the effective restraint which has been put upon Indian trading activities through the licensing laws, and in the Transvaal through legal restrictions on the ownership of property. Before dealing in more detail with such matters it is desirable to assess the political position of the Indian community in South Africa.

Except in the Cape, where anti-Asiatic sentiment has never been so strong as in other parts of the Union, and where Indians are

¹ *Report of the Transvaal Asiatic Land Tenure Act Commission, Parts I and II, U.G. 7, 1934, p. 137.*

still eligible both for the provincial and the municipal franchise, the Indian community has no political representation.¹ They have never possessed either franchise in the Transvaal, and in Natal they lost the provincial franchise in 1897, the franchise in boroughs in 1924, and the townships franchise in 1925, with the exception of those whose names were already on the rolls. The South African Indian Congress, a voluntary organization, is the recognized mouthpiece of Indian opinion, and opportunity has been given to this body to make representations to the governments of the Union and the provinces on many matters. It has, however, supported the policy of voluntary emigration from South Africa, and recently a separate organization, the Colonial Born and Indian Settlers Association, has come into being, which actively opposes the Union government's policy of seeking reduction of the Indian population by emigration.

The community has on more than one occasion received substantial support from the representations made on its behalf by the Government of India. In the inquiries held in 1914 and 1921 into the Indian question, and in the case of the Parliamentary Committee on the Areas Reservation Bill of 1925, the Indian government were permitted to send representatives who gave evidence in the interest of Indians, and at subsequent inquiries of this kind the views of the Indian government have been expressed by the Agent to the government of India. In spite, however, of these means of voicing their grievances, the lack of any political representation either in the provincial legislatures or in the municipalities deprives the Indian community of any effective voice in administrative and legal matters which affect their interests. Of these the most important are the administration of the licensing laws, and in the Transvaal the law relating to ownership of property. Licences to trade are required in every province, and although the law does not discriminate against Indian or coloured applicants as such, in practice the licensing system has been used to restrict Indian trading and to confine it to certain areas.

In Natal, licensing officers for urban areas are appointed by municipal authorities and appeals lie to the municipal authority

¹ See Chap. VI, p. 154.

itself. The courts are expressly excluded from jurisdiction in licensing matters, although there is an appeal to the Natal Supreme Court when the renewal of a licence is refused;¹ it is, however, difficult for an Indian to establish a case on the somewhat narrow grounds on which the court will admit an appeal. In the past the licensing authorities have admittedly used their powers to restrain Indians in the pursuit of trade. The Licensing Officer of Durban, for example, giving evidence in 1921 before the Asiatic Inquiry Commission, stated that 'A European licence is granted as a matter of course whereas an Indian licence is refused as a matter of course if it is a new one.' In 1925 the same officer stated that his policy, which had the support of the town council, had had the effect of gradually segregating Indian trading premises in the Grey Street area of Durban.² In rural areas in Natal licences are issued by a licensing board, appointed by the Administrator under an Ordinance of 1923, and there is an appeal to the Provincial Licensing Board only when refusal is on the ground that the applicant is not a fit and proper person to receive a licence. An amending Ordinance in 1935 gave power to refuse a licence on the ground that to grant it would depreciate adjacent property.

In the Cape, licences are issued on certificates from the local authorities themselves, and since Indians have the local franchise their interests are better protected. In the Transvaal a certificate of fitness must be obtained from the local authority before a licence can be issued. The Transvaal Licences Control Ordinance of 1931 gives complete discretion to the local authority as to the grounds on which certificates of fitness may be refused, and thus excludes any appeal to the courts on the ground of improper refusal. As in Natal the licensing law is admittedly used in such a way as to limit Indian trading. As recently as 1936 a municipal witness before the Select Committee on the Transvaal Asiatic Land Tenure Amendment Bill stated that³ 'Municipalities throughout the Transvaal have in the past consistently endeavoured to carry out the policy of the Transvaal to keep the coloured person separate from the white by refusing to grant trading licences to Indians.'

¹ Act 22 (Natal) of 1909.

² *Report of Select Committee*, Q. 124, p. 109.

³ *Minutes of Evidence*, Q. 1503.

The ownership and occupation of property is another matter in which Asiatics are subject to discrimination. In Natal there is no legal bar to the holding of land by Indians, and considerable property is owned by them; but the Natal municipalities have power to subject sales of land belonging to them to racial restrictions, and many private sales of land have been made subject to provisions precluding subsequent transfer to Asiatics. In the Transvaal, Indians and other Asiatics have been debarred from owning property since 1885, but up till 1919 they found a means of doing so through trustees or through land-holding companies. In addition there are special restrictions on the occupation of land by 'coloured persons' in areas proclaimed as public diggings under the Gold Law and the Townships (Amendment) Act of 1908. These were not, however, strictly enforced, and Indians in illegal occupation of such stands were given protection from eviction in 1919.

In 1930 it was found that there were still illegal occupants of such land; many of those who had been protected by the 1919 Act had since lost that protection by moving their premises or in other ways. A Select Committee of the Union legislature was set up to examine the question of the illegal occupation of such land, and their deliberations resulted in the Transvaal Asiatic Land Tenure (Amendment) Act of 1932. This Act gave power to the Minister to exempt from the provisions of the Gold Law selected land in the proclaimed areas. A commission presided over by Mr. Justice Feetham sat to make recommendations as to exemptions to be made under this Act, and in 1936 a further Act gave the right of ownership as well as of occupation of property to Indians in the 'exempted areas'. The areas which will come under the exemption clause have still to be announced. The Act also gives to the Union Minister for the Interior power to take measures to ensure proper municipal administration of the exempted areas, since it has been found in the past that, owing to the absence of Indian representation, municipal bodies tend to allow areas inhabited mainly by Indians to fall behind the rest of the land under their control.

As agreed at the Capetown Conference the Natal government appointed a committee to inquire into the facilities for Indian

education in the province. It considered that the existing facilities were inadequate, and proposed that the whole of the proportion of the Union government's subsidy paid to Natal in respect of Indian attendances, some 30 per cent. of which had previously been diverted to other purposes, should be spent on Indian education. It also suggested the extension of grant-aided schools, and the provision of government schools for Indians in the main centres of Indian population as soon as funds became available. The recommendations of this report were adopted, with the result that expenditure on Indian education in Natal has steadily increased.¹ Between 1926-7 and 1934-5 expenditure rose from £28,430 to £86,000, and school enrolments increased in the same period from 9,330 to 18,084. In 1934-5 the Natal government allotted £19,000 towards Indian education in addition to the Union government subsidy. In 1935 the distribution of milk to school-children was extended to Indian schools. During the same period educational facilities for Indians were considerably increased in the Transvaal.

The development of Indian education has been facilitated by the opening of Sastri College in Durban in 1929. This college was built at a cost of £20,000 by private subscription raised among the Indian community, on the initiative of Mr. Sastri, the first Agent of the government of India in South Africa. Although constructed at private expense the Natal government has accepted financial responsibility for it. Further provision has recently been made for secondary and higher education for Indians by the opening of a joint secondary school for Indian and coloured pupils at Johannesburg, and by a grant given by the Union government in 1935 for continuation schools and commercial education for Indians in Durban.

Housing is a matter in which the Indian community has benefited considerably since the Capetown Agreement. The housing conditions of the poorer class of Indians were at one time extremely bad. The Medical Officer of Johannesburg in 1904, writing of the Indian population of the town, which was then 1,677, pointed out that few lived in decent private houses, while Indians of the lower classes lived 'more or less crowded together in small

¹ See Chap. XVIII, p. 1213.

ill-constructed rooms lining courtyards which are often narrow, strewn with refuse and much befouled with slops and washing water'.¹ The habits of these Indians, according to the Medical Officer, were a serious danger to the health of the town. These conditions may be contrasted with those described to the Feetham Commission by the Medical Officer of Health as prevailing in Johannesburg in 1933. 'Asiatics are generally of the trading class and live in the back quarters of trading premises. In these circumstances they are as amenable to sanitary requirements as the average European of the poorer class, and, at times, are an example to such Europeans. . . . One can honestly say that these Indian tenants have co-operated in good faith and with alacrity with this Department in bettering housing conditions.' The inquiry into Indian housing in Durban, which was promised by the Capetown Agreement, showed that while much had been done by the Durban corporation in regard to housing for Europeans, little had been done for Indians. The difficulty arose partly from lack of land within the borough, but all sales of municipal land within the borough made between 1922 and 1928 had been restricted to Europeans. In regard to conditions in the areas outside Durban, where the majority of Indians resided, the report held that the bad conditions were frequently due to the inability of Indians to secure the freehold of their property, the worst conditions being found in short-lease property. In 1932 these areas were incorporated in the borough of Durban, and since that time action has been taken under the Slums Act,² and by the enforcement of sanitary regulations, which has brought about considerable improvement. The Agent to the government of India stated in 1936 that 'in spite of the fact that considerable improvement remains to be done, the living conditions have improved very much, substantial buildings have been erected, and the conditions generally are very satisfactory indeed'.

In social matters the Indian community in South Africa keeps very much to itself. There is, generally speaking, no social intermixture with Africans, nor does it seem that Indians have yet begun to occupy the position as leaders of native African opinion which was at one time thought likely. In common with other

¹ See *Report*, op. cit., U.G. 7, 1934, p. 135.

² Act 53 of 1934.

coloured people, Indians are required to use special compartments in trains, special counters in post offices, and are excluded from the better seats in places of entertainment. Some shops and restaurants refuse to serve coloured persons. In spite, however, of such racial differentiation, the Indian community has materially improved its social position in recent years. Successive Agents to the government of India have set themselves to encourage Indians to show, in practical form, their desire to improve their own standards of living and to take part in activities for the welfare of the Indian community and the public as a whole. The first notable example was the raising of £20,000 by Indian subscription for the building of Sastri College. Further instances have been the raising of relief funds to assist Indians distressed as a result of the flooding of a Durban suburb, and Indians unemployed through the trade depression in 1931. Donations have recently been made by wealthy Indians for the erection of Indian wards in the hospitals at Johannesburg and Pietermaritzburg; in 1935 the Indian and Malay communities jointly contributed £2,000 to the Groot-Schur Hospital Equipment Fund. An Indian Child Welfare Association and an Indian women's branch of the Red Cross have been formed. These are examples of a new outlook which is being strengthened by the increasing number of South African Indians who have been born and bred in the country, speak no Indian language, and regard the country as their home.

It will have been seen that in many respects the Indian community has improved its position since the Capetown Agreement of 1927. Apart from the question of provincial and municipal representation, and the existence of social discriminations, the disability now most keenly felt by Indians is the discriminatory use of the licensing laws, and the Transvaal restrictions on the holding of property. The course of events since the Capetown Agreement has shown an increasing desire on the part of the Union government to find, subject always to the maintenance of its 'civilized labour' and segregation policies, the means of removing Indian disabilities. But the former prejudice against Indians dies hard, and there is still a body of opinion in the Union which favours further Asiatic legislation. This opinion is strongest in the

Transvaal and showed itself during 1936 in the promotion of three private members' Bills in the Union legislature, which were the first attempt to impose further disabilities on Indians since the Capetown Agreement. These Bills were designed to make it impossible for a valid marriage to be contracted between a European and a coloured person, to empower provincial legislatures to prohibit the employment of Europeans by non-Europeans, and to prohibit the ownership of fixed property in the Transvaal by non-Asiatic wives of Asiatics, and by the children of such wives. The first Bill was not taken into consideration when it was shown that the number of such unions was negligible; the other two were considered by a select committee and have not been proceeded with. The promotion of these Bills may not unreasonably be taken as an example of the tendency to make capital out of the Asiatic question for political purposes.

As for the future, the political pressure which is based on the competition of Indians as traders will no doubt vary with the economic circumstances of the moment; that due to social policy, manifesting itself in the principle of racial segregation as a means of maintaining an unchallenged field for European standards of life, would seem to depend on the ability of the Indian community to adjust itself more closely to European conditions. Experience in India has shown that, while Indian civilization is strongly tenacious of its religious life and some aspects of its social customs in face of outside influences, Indians readily adopt the European manner of living, and standards of education, sanitation, and the like, where their economic conditions permit them to do so. There is, on the other side, among more informed elements in the Union a growing appreciation of the real nature of Indian culture; and even in a wider circle there is some realization that the standards of Indian life cannot be judged by those of the Natal indentured coolie. But perhaps the most potent factor which is likely to affect the future relations of Europeans and Indians is the recognition that the latter are ceasing to be an immigrant body, and comprise increasing numbers who have been born and educated in the Union, and whose attention is directed less to the requirements of Indians as a separate community than to the attainment of Union citizenship.

(c) *Indians in Kenya*

From early days Indians played a considerable part in the development of East Africa. They controlled the greater part of the trade of the whole coast, and the British East Africa Company contemplated Indian settlement on a very large scale. They have continued to play an important part under British rule. Indian troops were employed in its conquest, and Indian traders have been mainly responsible for conducting trade with the native population. The Uganda Railway was constructed almost entirely by Indian labour. At one time as many as 18,000 Indians were employed on the work, and, though most returned to India, some remained and settled as market-gardeners at Nairobi and on the coast as cultivators, and as artisans and traders. From 1900 onwards considerable immigration of traders and artisans from India to Kenya took place, and to-day the Indian community is the largest element in the non-native population of the colony. Its growth, as compared with that of the European community, is shown by the following statistics:

TABLE IV
Growth of Indian and European population

	<i>Indian</i>		<i>European</i>	
	<i>Number</i>	<i>Percentage of non-native population</i>	<i>Number</i>	<i>Percentage of non-native population</i>
1911 . .	10,651	44.1	3,175	13.1
1921 . .	22,822	50.0	9,651	12.1
1926 . .	26,759	49.9	12,529	23.3
1931 . .	39,644	53.6	16,812	22.7
1936 . .	38,325*	..	18,269*	..

* Estimated figures.

On the basis of the 1931 census it would appear that more than half of the Asiatic population is engaged in commerce. Industrial occupations take second place, while the residue is mainly employed in government and domestic service. The Indian trader has played a conspicuous part in the economic life of the East African territories. His ability to trade on a small turnover made it possible for him to carry imported goods into remote native areas,

where in early days he bartered them for native produce. By doing so he stimulated the wants of the native population and consequently their productive efforts. The keen trading sense of the Indian has, however, hitherto had the effect of keeping trade out of the hands of Africans, and to-day the Indian is still, outside the large towns, the principal distributing agent. In industry Indians are chiefly employed as artisans, and in such positions they have provided an element which, until recently at any rate, could not have been provided from the native population, and discharged services which the European population does not desire to perform. In agriculture Indians are few and declining in numbers. They engage in market-gardening, and sugar is grown by about forty-eight Indian planters at Kibos, who produce about 30,000 tons a year, a substantial proportion of the total production.

In Kenya the differences between the European and Indian communities, which have at times taken a very acute form, have centred mainly on three questions: the reservation of land in the highlands, the proposal to segregate Indians in urban areas, and the grant of representation to them in the legislature. An account will be given elsewhere¹ of the decision taken in 1902 to encourage the permanent settlement of Europeans in Kenya, and of the steps taken from 1906 onwards to reserve the highland areas for European occupation. Here it will suffice to note that in 1908 Lord Elgin announced the decision that 'while legal restrictions should not be placed on any section of the community, as a matter of administrative convenience grants of land in the uplands should not be made to Asiatics'.² The Crown Lands Ordinance of 1915 did not forbid Indians to acquire land anywhere, but in disposing of Crown lands in the highlands it is, in practice, stipulated that the buyers must be of European extraction; transfers between persons of different races have required the sanction of government.³ This decision has been strongly resented by Indians. The government of India has contended on their behalf that there are already enormous areas in other parts of the Empire from which they are totally excluded and that they have a special claim to equality of treat-

¹ See Chap. XII, pp. 820-2.

² *Tenure of Land in the East Africa Protectorate*, Cmd. 4117, 1908, pp. 25, 33.

³ See Chap. XII, p. 747.

ment in East Africa by reason of their early association with the country, and the part they have played in its development.¹

In addition to reserving the highlands to Europeans it became the practice from about 1912 onwards to impose as a condition of sale of a certain area of residential land in towns a covenant that it should not be occupied by any person not a European, and in some cases sales of such property were restricted to European bidding. This in effect introduced a type of residential segregation which was strongly opposed by the Indian community.

In the years immediately following the War there was a marked increase of anti-Indian sentiment among the European community. This resulted partly from a belief that there had been a large increase in Indian immigration, which aroused fears that the European community would be overwhelmed, and partly from the fact that Indian traders had made considerable profits during the campaign against German East Africa. A local economic commission which reported in 1919² made references to Indians as less civilized than the African in matters of sanitation, and as marked by a moral depravity which was inimical to African advancement; the commission accordingly demanded the limitation of further Indian immigration. Although this part of the report was repudiated by Lord Milner, the Secretary of State for the Colonies, it added to the bitterness of the Indian community. Lord Milner formally adopted a policy of racial segregation in residential areas in towns, but he ordered that there should be no discrimination against Indians in the immigration restrictions and that land outside the highlands of adequate extent and quality should be set aside for Indian settlement.³ These decisions led to representations by the government of India, which had become fully alive, as a result of events in South Africa, to the reaction of public opinion in India to the treatment accorded to Indians in Africa. In 1923 the British government issued a statement on their policy in regard to Indians in Kenya,⁴ to the principles of which it still adheres.⁵ This statement confirmed the policy of Lord Elgin in regard to the reservation of the highlands; the

¹ *Indians in Kenya Memorandum*, Cmd. 1922, 1923.

² *Economic Commission, Final Report*, Part I, 1919, p. 21.

³ Government Notice 281, Aug. 18, 1920.

⁴ *Op. cit.*, Cmd. 1922, 1923.

⁵ House of Commons *Official Report*, Nov. 10, 1937, c. 1752.

policy of residential segregation was abandoned, and it was laid down that restrictions upon immigration should be such only as were required by economic considerations and the interests of the African population.

The Indian agitation for representation on the legislative council, leading up to the grant of such representation on the basis of separate communal elections, has been already described.¹

Since 1923 the tension between the European and Indian communities has sensibly relaxed. In regard to immigration the position since 1923 has been that any British subject who is not an undesirable, and who can satisfy the Immigration Officer that he has means of support, can enter the country. Although the restrictive covenants already in force in respect of urban properties in 1923 have been maintained, the areas thus reserved to Europeans are comparatively small, and while Indians object in principle to the maintenance of these restrictions the matter is now of no great importance. The reservation of the highlands is, however, still a source of resentment to the Indian community, but it must be noted that for some years after Lord Milner's dispatch of 1920, land outside the highlands was kept available for Indian agricultural settlement, though there was apparently no demand for it. It may reasonably be doubted whether there is any considerable body of Indians who wish, under present conditions, to take to agriculture; the question seems at this stage to have become largely one of status.

The attacks made by the settler element on the Indian community have in the past often been of a nature which it is difficult to justify. The social relationship of the Indian and European communities has, however, never been as strained as it has been in South Africa. Social segregation exists to some extent. European clubs and hotels are for instance not open to Indians, even if they are well educated. There has, however, never been in Kenya such neglect of the interests of the Indian community in the administration of social services as prevailed in South Africa up to the time of the Capetown Agreement. Provision is made for the Indian population in the state medical service. In 1936 there were 73 Indian schools, 13 of which were maintained by the

¹ See Chap. VI, pp. 164-70.

government and 51 of which were aided from government funds. These schools had an enrolment of 7,227, and 3 of them provided education up to the Cambridge Junior and School Certificate examinations.

In a community in which special services have to be provided for different sections of the population, it is of importance to establish the extent to which the financial burden of administration falls on each section. This was one of the terms of reference to Lord Moyne, when he was appointed as commissioner to examine the finances of Kenya in 1932. On pages 1456 ff. of Chapter XX some considerations are given regarding the value to be attached to figures¹ prepared to illustrate the contribution of different communities to general revenues. Lord Moyne's figures are given subject to those considerations.

TABLE V

	<i>Contribution</i>	<i>Expenditure on community services</i>	<i>Contribution to indivisible services</i>
	£	£	£
European . . .	665,781	171,247	494,534
Asiatic . . .	385,658	46,080	339,578
Native . . .	791,100	331,956	459,144

Although the Asiatic contribution to indivisible services is 88 per cent. of its total contribution to revenue, the contribution to these services per head of the adult Asiatic population works out at £10 3s. per annum as compared with £40 per head per annum for the adult European population. Lord Moyne's conclusion was that as between the Asiatic and European communities the incidence of taxation was fair.²

Although in the economic sphere the interests of Indians have not come into serious conflict with those of other communities in the past, there are signs that in the future they may do so to a greater extent. In some measure this is due to the commercial character of the Indian population, since the interests of the producer may conflict in any community with those of traders.

¹ *Report by the Financial Commissioner on Certain Questions in Kenya*, Cmd. 4093, 1932, pp. 63-7.

² *Ibid.*, pp. 24 ff.

Indian witnesses before Lord Moyne's inquiry made representations against the protective tariff, and it is obvious that protection is contrary to the direct interests of importers, although they may benefit indirectly by the increase in the purchasing power of the producers. Another example of divergent interests is the control of the marketing of native produce introduced in 1935.¹ The object of this control, which has its precedent in other colonies, is, by the prevention of indiscriminate buying by large numbers of small purchasers, and by a system of regulated markets, to ensure that proper prices are given and that a satisfactory standard of produce is maintained. Such measures are designed to assist in building up a reliable export trade, but it is admitted that they involve some immediate loss to small traders, most of whom are Indian. Indians have, not unnaturally, opposed these measures, but it is not unreasonable to hold that they will, if successful in promoting the prosperity of natives, bring an increase in purchasing power which will more than compensate traders for their loss through the control of marketing.

It is, however, possible that in the near future Indians will have to face more substantial difficulties. The gradual increase in the number of educated Africans is bound to result in increasing competition with Indians. The Indian in East Africa has established a higher standard of living than he possesses in his own country, and educated natives will have little difficulty in competing with him once they have acquired the necessary capacities. Moreover, the number of Europeans willing to enter the better classes of clerical and manual employment is increasing also. Even in the commercial sphere it is not impossible that Africans will learn to compete successfully in small trade, and it is clear that there can be no legal or administrative protection from African competition.

(d) *Indians in Tanganyika*

Here Indians hold a position materially different from that in South Africa or Kenya, in that the terms of the mandate secure them against any form of administrative discrimination. The Germans had early recognized the economic value of the Indians

¹ See Chap. XX, p. 1422.

as traders, and, subject to the payment of a deposit, Indians had been freely admitted to the protectorate; at the date of the War a large part of the retail trade was in their hands. With the end of the War, their economic position greatly changed, for they managed to secure a considerable proportion of the German lands sold by the British government, and largely took the place of German firms in the import and export trade. They now hold some 282,843 acres of land as against 675,153 held by British and 453,611 by Germans.¹ The Indian population has increased considerably since the War; in 1921 there were 9,411 Indians against 2,447 Europeans; in 1931 the numbers were 23,422 and 8,228 respectively, and some 700 to 1,000 Indians have entered the country since 1931. Practically all the retail trade of the country and the major part of the import and export trade are now in their hands; as land proprietors and owners of ginneries they are large employers of African labour, and they are said to provide 30 per cent. of all the capital invested in agriculture. In 1937 about 1,000 Indians were employed in the lower grades of government service. Indians have combined to form a strong Indian Association with numerous local branches, and issue their own newspapers. They are represented in the legislature by three out of the ten unofficial nominations; it is contended that this is less than their proportion in relation to Europeans would warrant; but the point is unlikely to assume importance until the question arises of substituting election for nomination.

There are no considerable sources of friction between the Indian and other communities, although the introduction of native marketing control similar to that in Kenya and Uganda met with some opposition from Indians.²

Indian education in Tanganyika is well developed. An advisory board of 4 Hindus and 6 Mohammedans assists the administration in dealing with Indian educational questions. There are 3 government Indian schools and 53 non-government schools, 11 of which receive grants in aid from government funds. The government schools accommodate 700 pupils, while the non-government

¹ *Tanganyika Territory Department of Lands and Mines, Annual Report, 1936*, p. 6.

² *Report by H.M. Government to the Council of the League of Nations, 1937*, p. 82 and (for the position of Indians in the Territory) p. 72.

schools have a total attendance of 3,700. The principal school is the government Indian Central School at Dar-es-Salaam, which was opened in 1928, half the original estimated cost of £6,000 having been raised voluntarily by the Indian community. This school takes its best pupils up to London Matriculation standard.

(e) *Indians in Uganda*

It was estimated in 1935 that there were in Uganda 14,860 Asiatics and 1,994 Europeans. The Asiatic population, which includes a number of Arabs and Goans but is predominantly Indian, has increased slowly but steadily since the War. About 60 per cent. of the Indians in Uganda are permanently settled in the protectorate. The great majority of them are engaged in commerce, and it has indeed been calculated that as much as 90 per cent. of the total trade is in their hands,¹ but Indians also play a part in agriculture and industry. In 1935 there were 58 Indian estates, with a total area under cultivation of 21,306 acres, as compared with 223 European estates cultivating 22,564 acres. Recently an Indian firm has founded and developed a large sugar estate; there are two Indian sugar factories, with a joint output of about 10,000 tons per annum. Out of 194 cotton ginneries about 150 are Indian-owned, and in 1930 68 per cent. of the cotton crop was handled for export by Indian firms, as compared with 8 per cent. by European firms. Many Indians are employed in these ginneries, and they are also widely employed as artisans and clerical workers.

The main product of the protectorate is cotton, which constitutes 81 per cent. of the export trade; 91 per cent. of this is shipped to India. In the development of this trade, and in the distribution of imported goods from all sources, the Indian trader has been an essential medium. But, as in Kenya, the large number of these small middlemen has proved in modern conditions to be to some extent a handicap. The Uganda administration were the first in East Africa to adopt a system of licensing to control the purchase of cotton, but the control exercised in early days was not very strict. In May 1935 the Governor of Uganda said that in consequence of this laxity in earlier days 'there are to-day 194 ginneries in

¹ W. Fitzgerald, *Africa*, 1934, p. 246.

Uganda, where 50 would be sufficient to handle the crop, and this fact, combined with the activities of large numbers of middlemen buyers, has resulted in reckless competition in buying, involving . . . the mixing of different grades and qualities of cotton in the ginning process and other evils highly detrimental to the industry'.

To avoid similar developments in other industries the Uganda government promulgated in 1932 an 'Ordinance to control and regulate the Marketing of Native Produce'. This ordinance was on similar lines to the Kenya Ordinance already referred to. It was opposed by Indians for reasons similar to those advanced in Kenya.

The relations of the Indian and European communities in Uganda are good. There are no sources of political friction, and there is no discrimination in regard to land or residential conditions. The executive council of the protectorate is entirely official, while on the legislative council two representatives of the Europeans and two from the Indian community have been appointed by nomination. The question of representation was the source of some discontent between the years 1920-5 when the Indians had only one nominated seat; they then contended, though without success, for a franchise based on education and property qualifications applying to all alike. There is no differentiation between the different non-native races in Uganda in regard to taxation. There is a 'Uganda Association' which holds regular lectures and discussions in which Indians participate with Europeans and Africans on equal terms.

Indian education in Uganda is supervised by an Advisory Council of Indians presided over by the Director of Education. There are two government Indian schools, which work up to the standard of the Cambridge University Junior Entrance. In addition there are thirty-three Indian-owned schools which are aided from public funds. For higher education, Indian children are usually sent to India. The cost of Asiatic education is in part financed from the proceeds of an education cess of 20s. per annum, levied and spent upon the Asiatic population.

So far as South Africa is concerned, the position of the Indian community must be viewed largely in the light of its relations to

the European population in the economic and social field. But in areas such as Uganda and Tanganyika its future must be regarded rather as conditioned by the advance made by the native African population. The African has already invaded some of the fields of employment which the Indian at first occupied without challenge; natives are now employed largely on the railway, in postal and telegraph offices, and in an increasing number of subordinate posts in the administration.¹ The governments have not unreasonably committed themselves to give preference where possible to Africans over Indians in certain lines of employment, a policy which has already caused some apprehension among Indians. It has been suggested, when dealing with Kenya, that the position of Indians as traders may also be affected. This, however, must be viewed as a somewhat later development. Everywhere in South and East Africa the African has hitherto shown a singular unreadiness to engage in trade, and the Indian, as compared with the African, not only has a highly developed capacity as trader, but his connexion with India renders large supplies of capital readily available to him.²

¹ See Chap. VI, pp. 233-5.

² For a further discussion of the Indian question see Chapter XX, pp. 1421-2. Also *Report of the Commission on Closer Union in Eastern and Central Africa, 1929*, Cmd. 3234, pp. 204-11, and W. K. Hancock, *Problems of Nationality, 1918-36. Survey of British Commonwealth Affairs*, Vol. 1, pp. 166-249.

CHAPTER IX

NATIVE ADMINISTRATION

I. INTRODUCTION

IN their annual reports most African governments treat of their administrative activity under two headings, 'general' and 'native' administration. The latter term has acquired a special significance, peculiar to African conditions. Its use originated in circumstances in which governments primarily concerned with the interests of European colonization found it necessary to make special provision for dealing with the native communities in their area; an early case of this nature was the appointment of Shepstone in 1845 as Diplomatic Agent to the native tribes in Natal, a post subsequently converted into that of Secretary of Native Affairs. The term acquired a new significance with the development in South Africa of laws applying only to natives, and designed to regulate their position in the economic life of the European community. In the Union the term 'native administration' applies in the main to the conduct of matters arising from laws of this type, and to the regulation of questions connected with native lands, and native affairs in the reserves. The term has the same significance in Southern Rhodesia, where, though the range of differential legislation applying to natives is more limited, the trend of policy follows that of the Union. In those British areas and mandated territories in which the policy of indirect rule has now taken a developed form, the term has a more extended meaning. Here it embraces not only the supervision by the executive of conditions arising from differential legislation, which in these areas is less important than in southern Africa, but the operation of a system under which traditional authorities are entrusted with the discharge of a wide range of executive and judicial functions. It covers, therefore, a considerable field of administrative activity, varying in its character with the type of policy followed in regard to native affairs. While it is not possible to classify rigidly territories according to their native policies, they can be discussed under a grouping which will provide some means

of distinguishing the main characteristics of the systems followed. The Union, Southern Rhodesia, and Kenya have points in common which bring them for this purpose into one group; we shall deal in the next place with the High Commission territories, then the British areas in which the system of indirect rule exists in a developed form. Uganda, the Gold Coast, and Sierra Leone must be separately examined, and the French and Belgian systems.

II. SOUTH AFRICA

(a) *General Review*

The present-day policy of the Union in native affairs must be viewed in the light of the historical circumstances in which it originated. The Hottentot population was regarded from the beginning of the nineteenth century largely as a source of labour which would replace the supply withdrawn by the termination of the slave trade; a few tribes retained their tribal organizations for a time, but the Hottentots were gradually absorbed as wage-earners into the economy created by the expansion of European farming and retained neither a separate territory nor a distinct existence as a community; they could, therefore, subject to regulation of their position as labourers, be brought within the general scope of the administrative and judicial system applicable to Europeans. The Bantu, however, presented a different problem, not merely by reason of their number, but on account of the conditions under which they were brought into the framework of European society. At first a military menace, they were regarded as invaders against whom the colony must be defended, and many of the tribes did not come under European control until after the opening of the diamond and gold mines. The bulk of the 'Kaffirs' and Zulus were ultimately assigned land in reserves and locations,¹ where to some extent they retained their tribal organization, but even if circumstances had made it possible to establish there a system of purely native rule, this would not have solved the problems created by their entry as wage-earners into European agriculture and industry. The conduct of native affairs accordingly assumed a double aspect; first, the determination of the native's

¹ For the history of the reserve policy see Chap. XII, pp. 803-14.

position at the points where he entered into the economic life of the European community, and secondly, the supervision of tribal life in the areas assigned to him for permanent occupation. In the exercise of the first of these functions and in the enactment of the differential legislation which it involved, the dominant consideration was the needs of European economy; in the exercise of the second function, policy was influenced at the outset by views which tended to regard African institutions as incompatible with the recognition of natives as members of a civilized state, however subordinate a position they might occupy. In the absence of formulated theories of differential treatment, social progress seemed to demand that their customs and habit of life should be assimilated to those of civilized societies; on economic grounds, the maintenance of tribal institutions appeared to prevent the growth of incentives which would make them readily available as wage-earners. These considerations determined policy in what may be described as the early and middle periods of South African history.

At a later stage policy came under the influence of the theory of racial segregation. Hitherto attention had concentrated on the problems presented by the native as a factor in the economic life of the European community; the theory of racial segregation was further concerned with the position which he was to be assigned in its social and political life. The policy assumes that natives will be confined as before to the ranks of 'unskilled' labour in industry or of workers on the farms; they will not be allowed to practise within the sphere of the European social organization any of the professions which may bring them into competition with the European, nor will they be allowed any such political rights as will give them a direct share in the government of the country. On the other hand, no legal restriction will be placed on their capacity to improve their social or material conditions in the reserves or other lands assigned to them; the Prime Minister has said that one object of the Natives Bills of 1926 was to enable natives to exercise a measure of self-rule in their own areas;¹ and the latest development of policy makes a departure from previous practice in recog-

¹ Quoted by M. Perham in *The Protectorates of South Africa*, 1935, p. 112: see above, Chapter VI, p. 154.

nizing that more liberal assistance must be given to prevent a deterioration of their condition in the sphere which is regarded as appropriate to them.

The differential legislation which regulates the position of the native in his relations with the European community covers practically every aspect of social and economic life.¹ Its operation in the spheres of political representation, rights to land, the regulation of labour, and state-aided education, is discussed in other chapters.² The conditions of residence of natives in urban areas are strictly regulated by 'pass' laws and similar restrictions,³ and recent legislation provides that native urban populations may be limited to estimated labour requirements. In the field of justice the position is not easy to summarize; but it may be said generally that in criminal matters the native comes before the ordinary courts and is subject to European law, while civil cases between native and native, save in certain areas, may, where they involve questions of native custom, be determined according to native customary law.⁴

In dealing with the system followed in the organization of the native areas it will be necessary to give some account of the development in each province, up to the period when the Union laid the basis for a uniform policy in the Native Affairs Act of 1920, and the Native Administration Act of 1927.

(b) *Cape Province*

In the Cape Colony earlier policy in British Kaffraria, subsequently known as the Ciskei, was dominated by the desire to avoid direct relations with native tribes, and to control them through treaties with their chiefs.⁵ The feasibility of this policy and the attitude taken towards it in the Glenelg dispatch of 1835 have been much debated; in any case, the prospect of organizing any such system came to an end with the formal renunciation by Sir Harry Smith of the treaty policy in 1847. Henceforth the

¹ For a list of post-Union legislation, see E. H. Brookes, *The Colour Problems of South Africa*, 1934, p. 202.

² See Chap. VI, pp. 149-55; Chap. XI, pp. 664-72; Chap. XII, pp. 803-14; Chap. XVIII, p. 1219.

³ See below, pp. 499-510.

⁴ For further details, see p. 509 below, and Chap. VII, pp. 281-3.

⁵ See E. H. Brookes, *The History of Native Policy in South Africa*, 1927, p. 13.

Ciskei came progressively under what may best be described as 'magisterial' rule. In 1848 the chiefs were allowed the 'reasonable exercise of their authority' under the supervision of the magistrate; after the war of 1850 full authority was restored to them, the magistrate acting as political agent; but in 1855, though still allowed to hear cases, they were 'assisted' by the magistrates in doing so, and received an annual stipend in place of the revenues which they formerly enjoyed from fines and confiscations. The inevitable sequel followed; the magistrates were given sole authority to decide cases, and the chiefs were reduced to the position of assessors; as they lost their judicial authority, administrative control also passed into the hands of the magistrates, a process which signalled the disappearance of the chief as the recognized authority over the tribe.

At no time was formal recognition given in the Ciskei to native customary law. In 1835, it is true, resident agents between the Keiskama and Great Kei rivers were ordered to take into their courts only cases of treason, murder, rape, witchcraft, theft, or arson, leaving minor offences and civil cases to be disposed of by chiefs, and these limitations upon the jurisdiction of the chiefs were removed in the following year. When after the war of 1850 the Grey system, under which magistrates heard cases jointly with chiefs, was applied to Kaffraria, the colonial courts were ordered to decide cases according to equity and good conscience, deviating from native precedent only as much as might be necessary to attain this end. But after Kaffraria was incorporated in the Cape in 1865, colonial law was in theory applied throughout, and no mention was made of native law except for specified matters, such as intestate succession. The practice of the previous régime, however, forced the magistrates to admit expedients such as the establishment of an extra-legal court at King William's Town, which settled disputes under native law on the understanding that the parties would submit to its decision.¹ In some locations and villages, headmen dealt with petty cases without any authority to enforce their decision; elsewhere all cases went to the magistrate. The consequence was an embarrassing uncertainty as to the law applicable to any given case; the prevailing practice was that in

¹ H. Rogers, *Native Administration in the Union of South Africa*, 1933, p. 220.

purely native matters native law should prevail; but if native law clashed with colonial law, the latter applied.¹ 'Bride-price' (*lobolo*)² contracts were not recognized by colonial law, but some magistrates admitted them, while others refused. If this system may be said to have shown an undue disregard of the institutions by which native life was regulated, it must be remembered that it was associated also with the Cape political theory of 'equal rights for all men' which received its most notable expression in ordinance 50 of 1828³ and manifested itself, when the Cape received its first elected parliament in 1853, in the grant of franchise rights to non-Europeans. When British Bechuanaland was annexed in 1884, lack of administrative personnel, and the experience that had been gained in the Transkeian Territories indicated a different policy. By Proclamation no. 2 of 1885 the operation of native law was recognized; chiefs were given exclusive jurisdiction in civil cases between members of their own tribes and allowed to retain criminal jurisdiction except as regards certain serious crimes; it may be noted that these powers were preserved to them by the Native Administration Act of 1927.

The Transkeian Territories have had a different history. From the first they were viewed as a purely native area; and early records contain frequent references to the difficulty of confining in them the tribes whose presence in the colony was embarrassing. The process of annexation began with the proclamations relating to Fingoland and Griqualand East in 1879, and was completed by the incorporation of Pondoland in 1894. The various annexation laws recognized that the natives were 'not sufficiently advanced in civilization and social progress to be admitted to the full responsibility granted and imposed respectively by the ordinary laws of the Colony'; while, therefore, magisterial rule was extended to them, and, as in the Ciskei, the chiefs were reduced to the position of stipendiaries, native law was administered. This procedure was facilitated by the fact that legislation was by proclamation, which both made it possible to recognize native law, and to adjust its terms when necessary to the needs of the new conditions which had arisen. Whereas colonial laws operated in the Ciskei unless

¹ E. H. Brookes, *op. cit.*, 1927, p. 96; *The Cambridge History of the British Empire*, vol. viii, 1936, p. 825. ² See Chap. II, p. 41, note 3. ³ See Chap. VI, p. 150.

specially reserved, they applied to the Transkei only when extended by Parliament or by proclamation. The recognition of native law was provided for in the general regulations promulgated on the annexation of each territory, but it was not until the Cape Native Laws and Customs Commission of 1883 had made its important contribution to the study of the subject that a uniform system was adopted. The colonial criminal law was introduced in the form of the Transkeian Penal Code, Act 24 of 1886, designed as suitable to natives, but made applicable also to the few Europeans resident in the territories. This code introduced a few modifications in the colonial law of procedure, and adopted one principle of native law, that of communal responsibility in cases of stock theft, under a provision known as the 'spoor law', but without the safeguards customary in the tribe;¹ it also contained sections dealing with witchcraft. Native civil law was recognized in the magisterial courts, but no attempt was made either then or at any subsequent date to codify it.

The commission did not, however, stop at the regularization of the legal position; it recognized the need for local self-government, and recommended the institution of an informally elected native council. An example of a native area with its own revenues had existed since the Fingo District of Victoria East, annexed in 1846, had been surveyed in individual holdings, the rents from which were administered by the magistrate in charge in the interests of the community, though without consulting the opinion of the natives: also in 1882 a Fingoland District Fund was established, administered by a committee of magistrates and native headmen, into which Fingo men paid a voluntary levy of 2s. 6d. per annum, and proceeds amounting to about £800 annually were used to maintain a hospital and for public works.² From 1881 onwards Sauer, as Minister of Native Affairs, made it a practice to hold public meetings of natives for the discussion of matters affecting them, and Captain Matthew Blyth, the first chief magistrate of the Transkei, recommended in 1882 that 'a sort of Municipal Council be formed in each District'; in his

¹ *Cambridge History*, op. cit., p. 306.

² F. Brownlee, 'Administration of the Transkeian Native Territories', *Journal of the Royal African Society*, vol. xxxv, no. cxliv, 1937, pp. 39-49.

evidence before the 1883 commission Sir T. Shepstone suggested a council of chiefs. The recommendation of the commission did not bear fruit for some years; and meanwhile the parliamentary franchise was extended to the Transkei by Act 30 of 1887.

The Glen Grey Act of 1894, introduced by Rhodes, referred specifically to a Ciskei district, but its importance in the history of native administration is due mainly to its subsequent application to the Transkeian Territories. In principle it gave effect to the recommendations of the 1883 commission regarding the institution of a council, though it took a different form from that then contemplated. It had a dual aspect: the introduction of an individual form of land tenure, and the initiation of a practical system of local government in native areas. The first of these aspects will be separately described in the chapter dealing with land problems;¹ the second merits detailed treatment here. The Act contained at the outset the germ of the theory of political, as a corollary to territorial segregation, in that the holding of land in quit-rent tenure in districts to which it applied did not constitute a qualification for the parliamentary franchise. Rhodes described it as 'a Native Bill for Africa', and its principles regarding local government by means of a council were progressively extended by proclamation.

The Act provided for the creation of two separate types of local authority—subsidiary bodies known as location boards for the control of individual locations, and a higher body, the district council, responsible for the administration of local affairs in the district as a whole. The location boards came into existence only in Glen Grey; in the Transkei the district council was from the first the only form adopted. The Transkeian Proclamation 352 of 1894 established four district councils, each of which sent representatives to a General Council or Bunga constituted in the following year. By 1903 councils were established in thirteen districts, which sent their representatives to the Transkeian General Council;² by 1925 district councils had been constituted in each of the Transkeian districts, excepting Eastern Pondoland, and Mount

¹ See Chap. XII, pp. 843–5. See also Chap. XI, p. 638, for relation to the labour situation.

² Proclamation 152 of 1903.

Currie, which is predominantly European. In 1911 a General Council was established for the three districts of Western Pondoland, and in 1927 the four districts of Eastern Pondoland were also included in this council.¹ The two General Councils were federated in 1931 under the name of the United Transkeian Territories General Council.² Under the law now in force, each district council contains two members appointed by the government and four who represent native opinion. The method of selecting the four native representatives varies. In the Transkei they are nominated from among themselves by twelve persons elected by landowners and local taxpayers; in Pondoland two are chosen in this way, the other two being nominated by the paramount chiefs of Eastern and Western Pondoland. A further concession to native tradition has been made in the recognition of these two chiefs and the chief of Tembuland to act as additional members of the councils in whose districts they reside. The appointment of all native representatives is subject to the approval of the Governor-General.

In essence the council system, while providing for a measure of local government, was an extension of the system of magisterial rule; the district magistrate is chairman *ex officio* of the district council, the Chief Magistrate is chairman and chief executive officer of the General Council. This council consists of the chairman, the magistrates of the districts in which there are district councils, and three members of each district council. One of these members is nominated by government; in the Transkei the other two are nominated by the councils themselves for appointment by the Governor-General; in Pondoland each council nominates one and the chiefs nominate one. The chiefs of Eastern and Western Pondoland and Tembuland are *ex officio* members of the General Council. The district councils meet six times a year; the General Council annually. The function of the latter was originally confined to discussing and expressing an opinion on matters affecting the local native population; but in 1932 its constitution was revised³ and its powers were extended to include the consideration of any proposed legislation and the initiation of any

¹ Proclamations 169 of 1911 and 166 of 1927.

² Proclamation 279 of 1930.

³ Proclamation 191 of 1932.

matter relating to the condition of the native population of the Union, in so far as these affect the natives of the Transkei, and the consideration of any specific matter submitted to the council by the government. At the close of its meetings its resolutions are reviewed by a conference of the official members before submission to the Governor-General. This conference was at one time viewed with some suspicion by native opinion, but since the native members of the council have been allowed to be present at its discussions, suspicion has abated and less interest appears to be taken in its proceedings.

The revised constitution of 1932 contained another important innovation. Hitherto the competence of the General Council had been limited to offering advice to the Chief Magistrate as chief executive officer; the new constitution created a standing Executive Committee consisting of the Chief Magistrate with three other magistrates and four native members nominated by the council, to be responsible for the appointment and dismissal of staff, the establishment of agricultural institutions, the consideration of tenders for public works, and the institution of legal proceedings. Questions arising in the Executive Committee are decided by a majority of votes, but the chairman has the right to reserve for the decision of the Minister any resolution that is contrary to his own views.

The councils originally derived their revenues from an annual rate of 10s. upon adult males and upon women who occupied a separate hut or piece of land; but subsequently the Natives Taxation and Development Act of 1925¹ allocated to them the rents payable for land held on quit-rent, together with the proceeds of a local tax of 10s. levied in respect of every hut or dwelling in a native location occupied by a person who is not a quit-rent payer. These revenues are collected by government and handed over to the Treasurer of the General Council, a European official appointed by government. The position of the district councils is that of executive organs to the General Council; they have no separate revenues, but as far as possible the General Council distributes funds to them in proportion to revenues received from each district. Generally speaking, the district councils initiate

¹ See Chap. X, p. 554.

proposals for expenditure, which are collated and laid before the General Council in the form of estimates. The estimates as passed by the Council and the official conference require the approval of the Governor-General before they can be acted upon. The General Council is responsible for an annual expenditure of approximately £200,000; its total expenditure since its inception up to June 1935 amounted to £3,834,070. It has established three agricultural schools, a sheep farm, and three small experimental farms;¹ it employs ninety-seven agricultural demonstrators trained at the council schools, and it is responsible for the maintenance of some 4,400 miles of road. It makes a *pro rata* contribution to the cost of treating its ratepayers in state-aided and mission hospitals. Considerable sums have been spent on measures to combat soil erosion and on the conservation and supply of domestic water; the fencing of arable land is assisted by pound-for-pound grants.²

It remains to complete the account of developments in the Ciskei. The first local self-governing bodies for natives were village management boards, set up under the Village Management Act of 1881, which applied to natives and Europeans alike. These boards were not under European supervision, and proved a failure. The Glen Grey Act of 1894 provided in the first instance for a location board in each location, to consist of three persons appointed by the Governor after consultation with the local resident landholders. Its functions, as subsequently defined in Government Notice 936 of 1919, were confined to such matters as the care of water-courses, control of grass-burning, and the regulation of stock-grazing. These boards do not appear to have functioned regularly or with great effect; their value has been described as providing a useful mouthpiece for the people, and a source of advice to the magistrate in land administration. The Glen Grey District Council provided for by the Act was established in 1895; it consists of twelve members, six appointed by the government and six nominated by the location boards for appointment by the Governor-General. The boards were made subordinate to the council by the Glen Grey Amendment Act of 1905. It was not

¹ See Chap. XVIII, p. 1222.

² For comments on the working of the Council, see below, pp. 372-3, and pp. 330-2.

until after the passing of the Native Affairs Act of 1920 that the council system was further extended in the Ciskei. This Act provided for the institution of local councils for the whole or part of a declared native area. It permitted of either elective or appointed membership and gave a wide range of local powers, including the right to levy a rate, and responsibility for the provision of medical and educational facilities. Difficulties were found in the institution of councils owing to the different stages of development at which the communities affected had arrived. An amending Act of 1926¹ provided that where necessary the exercise by a council of its powers might be made subject to the approval of the Minister. By 1932 eight local councils with full powers had been established for native areas in the Ciskei, including Glen Grey, and in 1934 they were federated in the Ciskeian General Council.² The functions of this council are similar to those of the Transkeian General Council; but the district councils are on a federal instead of a union basis, and the revenues, which are now derived, as in the Transkei, mainly from quit-rents and the 10s. local tax imposed by the Natives Taxation and Development Act of 1925, are paid direct to each subordinate council and expended according to estimates approved by the Governor-General. The funds of the General Council are derived mainly from a percentage contribution from the subordinate councils, the standard rate being 12½ per cent.; in 1936 its expenditure amounted only to £4,101. The resources of the local councils vary; the largest, that of Glen Grey, spends an average of about £9,000 annually.

(c) *Natal*

The native policy of Natal was dictated by circumstances rather than by choice. The Blood River battle of 1838 appeared to have given a white population of 6,000 the control over 25,000 natives, and the first proposal of the Volksraad was to limit the native population in the European area to the number required for labour; no farmer was to keep more than five native families on his farm,³ and the surplus was to be moved to a tract between the

¹ Native Affairs Act, 1920; Amendment Act 27 of 1926.

² Proclamation 34 of 1934.

³ E. H. Brookes, *op. cit.*, 1927, p. 24.

Umtamvuma and Umzimbuvu rivers. But natives, anxious to return to their ancestral homes, continued to pour in from Zululand, and by 1845 it was found that the government had 100,000 to deal with. Wholesale removal was clearly impossible, and the Natal Native Commission of 1846-7 recommended that the refugees should be placed in 'locations',¹ an operation which Shepstone was able to complete without resistance. Of the hordes of natives for whom provision had now to be made, more than two-thirds were, as the result of Zulu rule, without chiefs or tribal organization. Shepstone himself favoured the policy of direct management through a superintendent in charge of each location; but the government was unable to find funds for the appointment of the superintendents, and Shepstone's only resource was to attempt the re-creation of the tribal system. In some cases he was able to gather the scattered members of tribes together under a scion of the old 'royal house'; in others, newly appointed chiefs had to be given jurisdiction. He succeeded in overcoming the Cape influence which would have made the native subject to Roman-Dutch law, and the Ordinance 3 of 1849 formally recognized native customary law, 'so far as it was not repugnant to the general principles of humanity observed throughout the civilized world'. It is noticeable that magistrates were at a later date officially styled 'Administrators of Native Law'. The chiefs were appointed officers of government and exercised judicial powers, though the extent of their jurisdiction was not defined and they were subject to the general control of the magistrates. In 1850 the Lieutenant-Governor of Natal was proclaimed supreme chief of the native population, a measure intended at the time to mark the replacement of the Zulu monarch; as supreme chief he had full authority to remove or appoint chiefs and in all court cases was the final appellate authority.

Shepstone's policy achieved its ends slowly and in spite of many obstacles. The Natal Commission of 1852-3² found that the locations were so large as to 'dry up the source whereby an abundant and continuous supply of Kaffir labour for wages might have been procured'; and stated its view that civilization could make no

¹ For the reserve policy in Natal, see Chap. XII, p. 719.

² *Report*, p. 4.

progress save under the direct rule of magistrates appointed for each location. The real obstacle in Shepstone's way, however, lay in the lack of resources for improvement of the locations. History has generally agreed that his system controlled the natives, but did little to advance their welfare; Merriman, the Cape statesman, speaking before the Native Affairs Commission of 1903-5,¹ charged Natal with not having elevated nor educated its natives: 'they are barbarians, and you have designedly left them in a state of barbarism'. But if this is in some measure true, it was due, so far as Shepstone was concerned, largely to the lack of funds for providing any improvement. He was opposed to the europeanization of the native people; but he recognized that the procedure of customary law was not universally applicable, and made provision for the more advanced native by a system of exemptions;² the limitations on the grant of the franchise to natives have been described.³ Exemption also was not easy to obtain, and was granted to a very small number; it was not popular among natives, since the actual privileges secured were negligible.

Shepstone's patriarchal administration of native affairs in Natal practically came to an end in 1875, and was followed by a period of transition lasting until 1893, in which some important aspects of his policy were modified. In Zululand, which had remained outside the Natal system, the war of 1879 resulted in the final destruction of the Zulu military power; the paramount Cetewayo was banished, and thirteen independent territories, each under its own chief, were created. A Resident was appointed, but no effective powers were given to him, and in the absence of central control disorder developed which led to the restoration of Cetewayo in 1882, and, after he had been put to flight by his rivals, to the annexation of Zululand to the Crown in 1887. In 1897 it became part of Natal, and was brought under the system of native administration of Natal; there had been in some quarters a serious fear of the consequences of leaving so large a Bantu population under the almost unrestricted power of its chiefs.

In 1875 a Board was appointed to codify the Bantu customary

¹ *Evidence*, vol. ii, p. 398.

² Law 11 of 1864, replaced by Law 28 of 1865.

³ See Chap. VI, p. 150.

law; crimes by natives were to be tried before the ordinary courts; chiefs and the administrators of native law were given power to decide civil disputes between natives; a Native High Court was instituted for hearing appeals from the courts of the administrators, and for trying certain crimes excluded from the jurisdiction of the ordinary courts, such as faction fights. Appeals from the Native High Court were to lie to a Court of Appeal, a branch of the Supreme Court, consisting of the Secretary of Native Affairs and Judges of the Supreme and Native High Court, instead of to the Lieutenant-Governor.¹ This separation of judicial and executive authority was criticized as representing a departure from the native system, though it must be noted that the magistrates continued to combine both functions; and the reference to the Supreme Court was significant, in that it brought the Natal native for the first time under an alien system of law. The first Natal code promulgated in 1878 was only a guide to Bantu customary law and was not binding on the courts; but Law 44 of 1887 prepared the way for a statutory native code having legal force, which was passed through the legislature as Law 19 of 1891. It had the grave defect that its only provision for revision was by way of amendment by Parliament, a procedure which incurred the justifiable criticism of the Natal Native Affairs Commission of 1906-7. The code, while maintaining to the chiefs their civil jurisdiction in all cases except divorce, allowed them no criminal powers, but they were made responsible for the maintenance of order and the apprehension of criminals.²

The period from 1893 up to the native rising of 1906 was marked by an increasing departure from the system which Shepstone had introduced. A government memorandum of 1908³ claimed that in Natal 'tribal organization has been used as a vehicle of administration. . . . By this system all the efficient machinery of the native form of government was brought into play, adapted and made available.' But the forces against the development of a system of what would now be described as indirect rule were strong; the chiefs were allowed only subordinate judicial powers; magistrates, taken from the Department of Justice, grew increas-

¹ Law 26 of 1875.

² Natal Native Code, 1891. See Chap. VII, p. 269.

³ Natal Government Notice 39 of Jan. 20, 1908.

ingly out of touch with native affairs, and though the reserves were protected by the creation of the Native Land Trust,¹ little was done to improve their condition, and no remedy was found for the growing disintegration of native tribal life and institutions. The commission of 1906-7 made detailed recommendations for administrative adjustments, including the appointment of Native Commissioners as purely executive officers, but it made no proposals which would involve a change in a system that now seemed to halt between two different theories of native development.

It was not to be expected that the passing of the Native Affairs Act of 1920 would lead to an extension of the council system in Natal; in fact, only one local council, that of Msinga, has been constituted, and the exercise of its powers is subject to the approval of the Minister, as provided for in the Act 27 of 1926.² On the other hand, no marked advance has been made in strengthening the authority of chiefs, or reconstructing tribal organization. The remarks of the Native Economic Commission of 1930-2,³ emphasizing the value of native institutions as providing a deep-rooted stock on which advanced ideas can be most fruitfully grafted, would seem to be specially relevant to Natal. The commission expressed in particular the opinion that it is better to administer law through native than through European tribunals, and proposed as a first step the extension to chiefs of greater powers in trying criminal cases. Eighty chiefs in Zululand retain the powers of civil and criminal jurisdiction which were given when Zululand was annexed; in the rest of Natal 222 chiefs, acting chiefs, and headmen retain their limited powers of civil jurisdiction, and it is now proposed to extend a measure of criminal jurisdiction to them. The terms of the Native Administration Act of 1927 provide for a more logical practice in regard to the recognition of native customary law. The difficulty previously noticed regarding the revision of the Natal Code of Native Law has been removed by section 24, which permits of its revision by proclamation; a revised code has been promulgated and extended to Zululand.⁴

¹ See Chap. XII, p. 719.

² *Report*, U.G. 22, 1932, paras. 199, 225.

³ See above, p. 356.

⁴ Proclamation 168 of 1932.

(d) The Transvaal

Native affairs in the Transvaal require less detailed treatment. The early attitude towards native questions has been well described as having been 'derived directly from the order of things which Ordinance 50 of 1828 and the abolition of the commando system in 1833 had destroyed in the Cape'.¹ In the absence of control by an organized central government, native affairs were treated by local authorities as a purely military problem, with the result that the tribes, either expelled from their lands or settled under farmer control, were broken up and disorganized. The early Transvaal farmers claimed that all natives within the limits of the republic were their subjects, liable to taxation and commando service. The course taken in regard to the land is described elsewhere.² At the outset only Roman-Dutch law was recognized and administered by magistrates; the chiefs were given no jurisdiction, though they continued to regulate disputes between tribesmen, and native cases seldom came before the Landdrost.

After the annexation of 1877 the British government set up a special Department of Native Affairs; this was retained after the retrocession, and its existence sensibly affected subsequent native policy. In a memorandum³ issued by the department in 1879, which seemed to be inspired by Natal influences, it was stated that experience had shown that the government of the native could not be carried on under the ordinary law of the country, and shortly before retrocession an Ordinance, no. 11 of 1881, was issued creating the Administrator supreme chief, and all the Landdrosts administrators of native law, and formally recognizing native law in civil matters in the courts of the Transvaal. This ordinance was shortly afterwards repudiated by the government of the restored South African Republic, but many of its provisions were subsequently embodied in Law 4 of 1885. It is noticeable that this law did not set up a Native High Court, but left the right of appeal and review with the President as paramount chief, and a new system was initiated by the appointment of native com-

¹ *Cambridge History*, op. cit., p. 398.

² See Chap. XII, p. 720.

³ Quoted by E. H. Brookes, op. cit., 1927, p. 125.

missioners, distinct from the magistrates, with executive and judicial powers. In spite, however, of the terms of the 1885 law, the Supreme Court never relinquished jurisdiction in civil cases, and the effect of the recognition of native law was undermined by the use which it made of the repugnancy clause; it refused, for instance, to acknowledge the legality of native customary marriages, and Law 3 of 1897, by recognizing only Christian and civil marriages, led to the non-recognition of *lobolo* marriages by the courts.¹ The Law of 1885 provided for the grant to chiefs appointed by government of petty civil jurisdiction within their own tribes, though they were given no power of execution. The general features of this system remained in force after the annexation of 1900; but by Act 29 of 1907 the power of reviewing the decisions of native commissioners, formerly vested in the Governor and Commissioner of Native Affairs, was withdrawn, and the appeal was vested in the Supreme Court of the province. With the passing of the Native Affairs Act of 1920 an experiment was made in the institution of local councils, and five such councils have been set up; with the exception of one case in which full powers have been granted, they exercise the restricted powers for which provision was made by Act 27 of 1926. Recent policy has tended towards a greater use of the chiefs in judicial matters. Their powers, as in Natal, are regulated by the Native Administration Act of 1927, which also, in recognizing the validity of marriages contracted in accordance with native custom, redresses the inequity caused by the former Transvaal law.

(e) *The Orange Free State*

In the Orange Free State the native population in the reserves was never large; to-day, in spite of immigration, it is still far lower in proportion to Europeans than in any other province of the Union. The Free State had at one time a Department of Native Affairs, but it was abolished in 1908, when native administration was entrusted to the Colonial Secretary's Department; from the first it controlled its native population through the regular establishment of magistrates, and has only posted special officers to the reserves at Thaba 'Nchu and Witzieshoek.² At the outset it gave

¹ See Chap. VII, p. 268.

² See Chap. XII, p. 720.

no general recognition to native law, but by a special enactment¹ acknowledged the legality of native marriages in the Thaba 'Nchu reserve; elsewhere they received no recognition until the passing of Law 26 of 1899, which provided that the children of such marriages were to be regarded as legitimate for purposes of inheritance, and established the paternal power of the father; a system of intestate succession, derived from Roman-Dutch law, and repugnant to Bantu conceptions, was introduced, but not operated, outside the Thaba 'Nchu reserve. As in the rest of the Union, that situation has been remedied by the provisions of the Native Administration Act of 1927. The chiefs in the reserves were at first given no judicial powers; two have now civil and criminal, and one civil jurisdiction only, under the Native Administration Act. At an earlier stage a Native Reserve Board was created in each of the three reserves under Ordinance no. 6 of 1907; there are now four such boards. The members are nominated, and sit under the chairmanship of the magistrate; they draw their revenues from the local tax imposed by the Natives Taxation and Development Act. Their functions are wider than those of the Location Boards in the Cape, constituted under the Glen Grey Act of 1894.²

(f) *Native Affairs under the Union*

The South Africa Act of 1909³ laid down that the control and administration of native affairs should vest in the Governor-General in Council, who should exercise all special powers in regard to native administration previously vested in the governors of the several colonies, or exercised by them as supreme chiefs. From the first, native affairs had been reserved in greater or less measure from the field of ordinary legislation. When the various territories of the Transkei were annexed to the Cape Province, the Annexation Acts conferred on the Governor an unrestricted power of legislation by proclamation, and provided that no Act of the legislature should apply unless it contained a special provision to this effect or was extended to the area by the Governor's

¹ *Wetboek van die Oranje Vrijstaat*, Hoofdstuk, iv, i.

² See above, p. 355.

³ Section 147.

proclamation: this power was reaffirmed in respect of all the Transkeian territories by the Cape Act of 1897. The Governor was declared supreme chief in Natal in 1850,¹ and under the Natal Code of Native Law exercised wide authority in regard to the appointment of chiefs and the issue of executive orders through them. The Transvaal Law 4 of 1885 constituted the President paramount chief of the native population, with the full authority vested by native custom in a paramount chief; and the Act also gave him a general power to frame regulations for the better working of the law. After annexation these powers passed to the Governor, and the Letters Patent issued upon the grant of responsible government in the Orange River Colony in 1907 conferred a similar authority on the Governor of that colony. On the establishment of the Union, the Native Affairs Department was entrusted with all the matters hitherto vested in the Native Affairs Departments of the colonies, and became the executive authority for the purpose of powers transferred to the Governor-General in Council by section 147 of the Union Act.

The authority acquired by the Native Affairs Department thus depended partly on statutes, placing administrative functions in the hands of the government, and partly on the powers which it derived as successor to the governors in their position of supreme or paramount chiefs. These latter powers, however, were vague and undefined, save in Natal, where they were embodied in the Natal Code of Native Law; elsewhere, they were based on an interpretation of Bantu customary law, which, if in many ways convenient, was, as has often been claimed, of questionable validity.² They could not in any case be logically exercised in the same manner over natives living in tribal conditions, and those who had become more or less permanently resident in European areas; and they could have little real foundation in the Ciskei, where the tribal organization had as a matter of policy been broken up. The executive authority of the Union Native Affairs Department, therefore, where it was not derived from specific enactment, stood on an indefinite basis for some years, and the need of a clearer legal definition was pointed out by the courts.

¹ See above, p. 357.

² See, for instance, E. H. Brookes, *op. cit.*, 1934, p. 107.

The first step taken, however, was not in this direction, but in the establishment of a body to advise in native affairs and to consult with the natives themselves. Act 23 of 1920, which provided for the general extension of the council system inaugurated by the Glen Grey Act of 1894,¹ also constituted a permanent Native Affairs Commission under the chairmanship of the Minister of Native Affairs. It was to have not less than three nor more than five other members.

The Native Affairs Commission was given a consultative and advisory position in regard to the general conduct of native affairs or to legislation affecting natives; if the Minister did not accept its advice, the Commission might require that its views be submitted to the Governor-General; if the latter did not accept its recommendations, it might require that the papers should be laid before the Houses of Parliament. In certain specified matters it was incumbent on the Minister to seek the Commission's advice, as in the establishment of local councils, the holding of native conferences to discuss proposed legislation, and the appropriation of moneys accruing to the Native Development Account.² The influence which a body of this character could exercise on native affairs depended largely on the character and independence of the members whom government nominated to serve on it. At the outset it had a certain effect on policy; in later years, partly owing to a cessation of activity while its members served on the Native Economic Commission, and partly to changes in its personnel, its influence declined. Its functions, however, have increased considerably since the passing of the Native Trust and Land Act of 1936, which requires that the Minister, in administering the affairs of the South African Native Trust Fund under delegation of authority from the Governor-General as trustee, must act in consultation with it.³ The value of its advice must largely depend, as before, on the calibre of its membership.

The provision made in the Act of 1920 for holding native conferences had its effect in the summoning in 1922 of a conference which it was originally intended should meet annually, and which did so for a few years. The measure was of value; but the attitude

¹ See above, pp. 352-6.

² See Chap. XVIII, p. 1213.

³ Native Trust and Land Act of 1936, sub-sect. 3 of sect. 4.

taken by the conference in regard to the native land and franchise Bills was viewed with disfavour, and after 1927 it was convened only once. Regional conferences were, however, held to discuss the terms of these Bills. The same necessity for the summoning of native conferences no longer exists, in view of the establishment of the Natives Representative Council under the Representation of Natives Act of 1936.¹

The Native Administration Act of 1927, which, as has been shown, made an important departure in its recognition of native customary law, was also designed to clarify the legal position of the executive government in its control of native affairs. Its first section vested in the Governor-General (that is to say, the officer administering the government of the Union, acting by and with the advice of the executive council)² the position of supreme chief of all the natives in Natal, Transvaal, and the Orange Free State; as supreme chief he could alter tribal boundaries, divide tribes or order their removal from one place to another. His further powers as supreme chief were defined as those held by him from time to time in respect of natives of Natal. It is important to note the legal effect of this provision. It did not confine the Governor-General to the powers then embodied in the Natal Code; section 24 empowered him to modify the code from time to time by proclamation. While, therefore, the provision had the advantage of basing the authority of the executive on written law instead of on an undefined usage, it at the same time gave to the Governor-General as supreme chief practically unfettered power of legislation by proclamation in regard to purely native matters in the three provinces. The Act further gave explicit powers to amend by proclamation any law then applicable to 'scheduled' native areas, and proclaim new laws in them (section 25); to issue regulations in a defined range of subjects (section 27); to create 'pass' areas and issue 'pass' regulations (section 28),³ and by executive action to restrain the dissemination of dangerous doctrines among natives, including the restriction of entry into native areas or removal from them (section 29). The only restriction on this edictal

¹ For Natives Representative Council, see Chap. VI, pp. 153-5.

² Interpretation of Laws Act, 5 of 1910.

³ For an account of the 'pass' system, see Chap. XI, pp. 664-72.

legislation lies in the provision embodied in section 26 that proclamations must be laid on the table of both Houses of Parliament, which can by resolutions passed in the same session move for their repeal.

The wide powers conferred on the executive to legislate by proclamation in regard to native affairs had their precedent in the powers of legislation vested in governors before the Union;¹ but their maintenance in more modern times has been much criticized. It is admitted that there are a number of administrative matters in which the executive must have, as it has elsewhere, a rule-making power; it has been argued, however, that in normal practice the limits of this power are clearly defined in the substantive law; it is not usual to extend the rule-making power to matters of policy, or to permit it to make restrictions on individual liberty or rights of property. On the other hand, similar powers are exercised by the executive in many of the British Crown colonies; even where legislation normally takes the form of law or ordinance passed by a legislative council, the Crown still retains the power to make laws in the form of an Order in Council.² Again, in the French colonies, legislation is entirely by ministerial decree, and the same is true of the Belgian Congo, save for a limited number of subjects.³ If, therefore, there is any anomaly in a system such as that created by the 1927 Act, it lies in the fact that the country at large is under a parliamentary régime, and that laws affecting the rights of Europeans are made by the normal process of legislation. It has, moreover, been claimed, not without some justice, that in the absence of a native franchise the position of the native is not materially affected by the placing of legislative powers in the hands of the executive. The use to which the measure has been put is perhaps a better criterion of its value than any theory of constitutional law. Proclamation 165 of 1932, which repealed the old Natal Code and substituted a new one, contains in its section 8 a provision for the summary arrest and detention of any native judged to be dangerous to the public peace; again, Proclamation 252 of 1928 prohibits the holding in any native area in the three northern provinces of

¹ See above, pp. 363-4.

² See Chap. VII, p. 272.

³ See Chap. VI, pp. 185, and 206.

gatherings of more than ten persons for other than religious or domestic purposes without the approval of the magistrate of the district. Both these provisions are of a type which would normally have been made the subject of substantive legislation; but with these exceptions, the use of proclamation does not seem to have gone beyond the scope commonly taken elsewhere by the rule-making powers of an executive government.¹

The Native Administration Act of 1927 had a further importance in its effect on the organization of the Native Affairs Department.² Hitherto district administration had been carried on by a variety of different agencies, magisterial and other. Section 2 of the Act may be regarded as having accorded statutory recognition to the principle that in predominantly native areas administrative functions should, as far as possible, be entrusted to native commissioners serving under the Native Affairs Department. In purely native areas such as the Transkeian territories, the executive authorities are officers of the Native Affairs Department, though they are also given magisterial powers by the Department of Justice. Within the last few years the Native Affairs Department has taken over fifteen predominantly native districts formerly held by officers of the Department of Justice. In districts with a large European population, which also contain a considerable number of natives, the chief local executive officer remains the magistrate under the Department of Justice, but he may be made a native commissioner, and in addition it is usual to appoint an official of the Native Affairs Department as additional or assistant native commissioner.³ Where there is any considerable European population the magistrate has little time for dealing with the reserves. Only where there are few natives is no appointment of any kind made from the Native Affairs Department. While this change constitutes a substantial advance, in that it allows for the appointment of a body of officers with special experience of native affairs, the position would be further improved if the Union were to provide a course of special training for officers entering the service of the Native Affairs Department. As is shown elsewhere,⁴ the in-

¹ For a list of the proclamations issued, see H. Rogers, *op. cit.*, pp. 26-9.

² *Official Year Book of the Union of South Africa*, 1937, p. 118.

³ H. Rogers, *op. cit.*, pp. 12-13.

⁴ See Chap. II, p. 53.

ducement given to its officers to take the course of Bantu studies at the universities has now been withdrawn.

The unusually wide range of legislation applicable to natives in the Union gives the Native Affairs Department a correspondingly wide field of activity. The Native Labour Regulation Act of 1911 vested in it the supervision of the recruiting and employment of native labour, for which purpose it maintains a Director of Native Labour;¹ it administers the Natives (Urban Areas) Act of 1923,² and is responsible for the purchase and management of lands in 'released' areas under the Land Act, 1936;³ through its control of the Native Development Fund, from which native education is financed, it takes a part in native educational policy,⁴ and the increasing attention given to the improvement of conditions in the reserves has involved the addition to its establishment of agricultural and engineering sections functioning under an officer known as the Controller of Native Settlements.⁵ It thus discharges in regard to natives a number of functions which, in relation to Europeans, are carried out by separate departments of state.

The policy which has dictated the measures taken to regulate the position of natives in their contact with the European economy has the same historical background as that which applies to the organization of conditions in the native areas and in great measure reflects the same outlook, but it is possible to distinguish the tendencies shown in the more recent development of these two aspects of policy. It would be just to say that during the last decade the differential legislation applicable to natives has not only taken a wider scope but has assumed a more restrictive character. The influence of the 'civilized labour' policy⁶ and of the theory of segregation has made itself felt in legislation, of which the Native Service Contract Act of 1932 and the recent Native Laws Amendment Act, 1937,⁷ form the most significant examples, while the rigour with which regulations of the character of the pass laws or the Masters and Servants Acts are administered remains a characteristic feature of the administration. The political reactions of

¹ See Chap. XI, p. 673.

³ See Chap. XII, pp. 722-5.

⁵ See Chap. XII, p. 809.

⁷ See below, pp. 501-2.

² See below, p. 500.

⁴ See Chap. XVIII, pp. 1213-14.

⁶ See Chap. XI, pp. 682-92.

this policy have been seen in the passing of the Representation of Natives Act, with its restriction of the franchise formerly enjoyed by natives in the Cape.¹ It is true that there are few territories containing both European and native populations in which some discriminatory legislation has not been found necessary, but South Africa has perhaps made the greatest use of this type of law.

The Union may, indeed, be said to occupy the position at one end of the scale which British India occupies at the other. In the latter, the only legislation which can be described as differential is that which gives to Europeans, as also to Moslems and Sikhs, the right to exercise a communal vote, and secures to Europeans and Indians certain privileges in the trial of criminal cases in which they are respectively concerned. With these exceptions, it would be difficult to find any instance of discrimination; the existence of a legal provision securing to each group in the community the right of maintaining its personal law of marriage or succession does not, of course, come within this description. But the comparison serves to illustrate the difference alike of circumstance and policy which has produced the special legislation of South Africa. The problem of the Union is, indeed, almost unique: it is that of integrating into one social organization 2,000,000 Europeans and 6,000,000 Africans. In view of the disparity in the social standards and economic development of the European and the Bantu, at the stage at which the latter now stands, some measure of differential treatment would appear to be inevitable; it is the far-reaching range of the legislation now in force, its unusually restrictive character, and the operation of the machinery of pass laws or regulations affecting personal liberty which it employs, that have attracted attention and invited criticism. Considerations of equity and the standards of good administration may produce modifications of the system, but factors of a more fundamental nature must decide its ultimate fate. Economic developments will in the end determine whether the Union can maintain the restrictions which confine so large a part of its available labour to unskilled employment. Again, should there be a considerable increase in the number of natives who attain a high standard of education, despite the disabilities imposed upon them, the Union may find it difficult

¹ See Chap. VI, pp. 152-5.

to justify to itself the maintenance of a classification which rigidly separates the European and native population, and prohibits the entry of Africans into the European legal and social system.

There has, however, been a partial change in that aspect of native policy which relates to the native areas. The formal recognition given to native customary law, the extension of the system under which the local administration is vested in officers of the Native Affairs Department, the repurchase of large areas for native occupation contemplated by the Land Act of 1936, the provision for agricultural and other improvements in the reserves, to which the government now appears to be committed,¹ the extension of medical facilities implied in proposals made for a course for medical aids,² may be quoted as evidence that greater attention is now being paid to the needs of the native areas. Practical expression in the form of a considerable amount of legislation, financial aid, and departmental activity has been given to the realization, which is now widespread throughout the Union, that standards of health, education, agriculture, and living conditions generally in these areas must be steadily improved, and ample lands suitable for economic development must be provided for the use of natives if the drift to the towns is to be checked with any degree of success, a regular supply of labour maintained, and discontent avoided. In regard to internal political development, policy is definitely directed to the extension of local government institutions through the council system. One passage of the report of the Native Economic Commission³ might, it is true, seem to advocate a policy of reconstructing the traditional institutions based on the authority of the chiefs, and, as has already been shown,⁴ some steps have since been taken to extend their judicial powers. The administrative functions of chiefs and headmen, as defined by regulations⁵ issued under the Native Administration Act of 1927, do not go beyond the prevention and detection of crime, the giving of assistance in connexion with the registration of taxpayers and the collection of taxes, the supply of labour, the administration of laws relating to the allotment of lands and kraal sites, and the dispersal of unlawful assemblies. If, then, there is any

¹ See Chap. XII, p. 808.

² See Chap. XVII, p. 1155.

³ See above, p. 360.

⁴ See Chap. VII, p. 284.

⁵ Government Notice 2251 of 1928.

tendency to recognize the traditional position of chiefs, it exists mainly in the judicial field, and it does not seem that there is any intention of granting wider administrative authority on the lines adopted in areas where the system of indirect rule prevails. South African opinion has never declared itself clearly in favour of this principle; it holds to the policy of developing local self-government through the council system, and it has been encouraged in this view by the success which is considered to have been achieved by the General Council in the Transkeian Territories. It is of importance, therefore, to attempt some estimate of the position attained by it; elsewhere, as has been shown,¹ the councils have less importance.

Some observers have been impressed by the scale and character of the works undertaken by the General Council; that, however, is not necessarily evidence of the value of the council system; the large resources available for expenditure are derived from a general tax imposed by government, not by the council, and the responsibility for expenditure and administrative control has remained in official hands. The test of the system must lie in the evidence which it affords of the capacity of its African members to undertake a more independent control of the interests committed to the council, and of their ability to secure support in raising fresh resources where necessary. The history of the territories has given their inhabitants a common sentiment and some sense of independence; the Bunga has had the benefit of the encouragement and guidance of a succession of officers who have identified themselves with native interests in the territories. It is agreed by all who have had experience of its proceedings that they have been dignified and well conducted; the African members have shown intelligence and a sense of responsibility for the interests of their community in debating the issues which have been laid before them; the expression of their views has been of great value to the official members of the council. Membership of the council has undoubtedly had an educative influence, but its African members have not yet been tested by the grant of any effective responsibility. It will only be possible to judge whether it constitutes a real organ of local self-government if official control is progressively withdrawn from its newly

¹ See above, pp. 355-6.

constituted executive council, and supervision from without takes the place of control within the General Council itself. The result will afford an indication of the success which the extension of similar institutions may be expected to attain elsewhere, and may further afford material for a decision as to the respective merits of the different systems of council organization adopted in the Ciskei and Transkei.

III. SOUTH-WEST AFRICA

In the mandated territory of South-West Africa circumstances have not yet called for any such discussion on native policy as marked the course of the debates on the Native Trust and Land Bill and the Representation of Natives Bill in the Union; of recent years, indeed, attention has centred, to the exclusion of other issues, on the problems relating to the definition of the political status of the German colonists. It must nevertheless be assumed that the interest of the Union in the development of European colonization will give it the same outlook on native affairs in the South-West as in the Union itself, though the manner in which policy manifests itself in practice may be affected by the existence of the mandate. The Union succeeded to a régime which had, save in Ovamboland, resulted in the complete disorganization of tribal institutions; indeed some tribes, such as the Hereros, had for military reasons been deliberately dispersed.¹ For some years therefore the primary concern of the administration was the re-settlement of tribes in the reserves.² In dealing with the native in his relations with the European community, the administration has taken over from the Union much of its differential system; native labour regulations have been adopted for the control of conditions of employment;³ a Masters and Servants law,⁴ a Vagrancy law,⁵ and pass regulations⁶ modelled on those of the Union are in force, and Proclamation 34 of 1924 regulating the conditions of urban natives includes the main provisions of the Union Natives (Urban Areas) Act of 1923. It is understood that

¹ *Report of South West Africa Commission*, U.G. 26, 1936, p. 23.

² See Chap. XII, p. 727.

³ Proclamation 3 of 1917, amended by Proclamations 6 of 1924, 6 of 1925, and 27 of 1931.

⁴ Proclamation 34 of 1920, amended by Proclamation 19 of 1923.

⁵ Proclamation 25 of 1920.

⁶ Proclamations 11 of 1922 and 20 of 1935.

a measure based on the Native Laws Amendment Act of 1937¹ may be applied to the location at Windhoek. The range of differential legislation is, however, less extensive than in the Union. More land is available for the native population; there is not the large 'poor white' community, the existence of which, as will be shown elsewhere,² has been the main ground for the legal restriction of the native in the Union to the ranks of 'unskilled' labour; nor have the conditions of native farm labour yet led to the adoption of the provisions of the Native Service Contract Act of 1932.³ It is clear that the course of differential legislation of this character will be largely determined by the fact that the rural economy is mainly pastoral, and that industrial activity is, as compared with that of the Union, on a small scale.

Native affairs are included in the subjects for which the Administrator legislates by proclamation. His advisory council includes one member nominated for his knowledge of native affairs. The organization of conditions in native areas is regulated by the Native Administration Proclamation of 1928, which applies the main provisions of the Union Native Administration Act of 1927. There are, however, important differences between these statutes; the former does not specially authorize the administration to confer judicial powers upon the chiefs, it stipulates that appeals from the Native Commissioner's Court shall go before the High Court and not a Native Appeal Court such as exists in the Union, and it does not withdraw from native commissioners jurisdiction over matrimonial cases where the marriage has been contracted by Christian or civil rites. Native customary law is formally recognized, and the chiefs have in principle the position of agents for preserving peace and for carrying out other similar functions which have already been described when dealing with the operation of the Act of 1927 in the Union. Conditions have, however, led to the adoption of a considerable variety of practice in different tribal areas. Ovamboland, even under German rule, was left to the operation of its own tribal organization, and it represents to-day the one area in South-West Africa in which this organization exists in any force, and can be utilized by the administration as an organ of government. Though the recognized court is that

¹ See below, pp. 501-2.

² See Chap. XI, pp. 684-6.

³ Ibid., p. 667.

of the native commissioner and the chiefs have not been given any defined judicial powers, they and their councils are in practice allowed to dispose of a large number of cases, only the more serious crimes being taken to the Native Commissioner's Court, where they are either tried as offences against customary law or transferred to the court of the magistrate. The institution of a Reserve Trust Fund,¹ into which all taxes are paid, and also the rentals of trading sites and tribal levies, affords some measure of local government, in so far that, while the responsibility for expenditure lies with the native commissioner, he is advised by a board consisting of the headmen and not more than six other native members, elected by the natives 'at a representative meeting'. Though the report of the Commission of 1936 speaks of the system followed in Ovamboland as one of 'indirect rule', this term could only be applied to it in the sense that it might have been applicable to the system adopted by Shepstone in Natal; but it is at the same time true that Ovamboland occupies a unique position in the territories administered by the Union, if judged by the extent to which a conscious effort is made to utilize tribal institutions. It is to be noted that the chiefs are the recognized authorities in three of the tribes; the other three are governed by a council of headmen. In the Police Zone—namely, the area to which European settlement is confined—the administration is still engaged, with a varying degree of success, in the attempt to reconstruct tribal organization.² Where a chief and council can be found to function, they are allowed much the same powers to dispose of native cases, and to associate with the management of the Reserve Trust Fund, as in Ovamboland; where, however, no such organization is active, as among the Damaras and Namas, cases go direct to the magistrate. The Bastards, residents in the Rehoboth Reserve, are of mixed European and non-European descent, and had claimed before the Enquiry Commission of 1921³ that they should be administered as a separate unit by their own council, which they elected in accordance with a constitution framed before the German occupation. It was recognized in 1923 by the administration under its

¹ Proclamation 9 of 1924 and Government Notice 157 of 1924.

² Of the population of 254,000 about 111,000 are resident in the Police Zone.

³ *Report*, U.G. 24, 1921.

agreement with the Rehoboth community,¹ but was suspended in 1924 owing to internal dissension. The functions of the council were vested in the magistrate, who is assisted by an advisory council which at first consisted of three nominated and three elected members; in 1935 provision was made for the election of all six members.²

The administrative control of native affairs is now exercised, under the Administrator, by a Chief Native Commissioner; in Ovamboland, Okavango, and four of the Police Zone districts, native commissioners have been appointed under the Native Administration Proclamation of 1928; elsewhere magistrates in charge of districts have also received powers as native commissioners. There is no separate department of native affairs. The character of the officers serving in this area is a matter of great importance, and the Union has hitherto had the benefit of the services of a certain number of officers of exceptional knowledge of the tribal areas. A special allowance is given to officers serving in South-West Africa, but it would nevertheless seem that some difficulty has been experienced in obtaining the officers required for enlarging the cadre of native commissioners; the task of reconstruction with which the administration is faced would seem, however, to demand an addition to the existing establishment.

IV. SOUTHERN RHODESIA

The nature of the control to be exercised over the conduct of native affairs formed a prominent issue when Southern Rhodesia received its constitution in 1923. The charter of the British South Africa Company had in general form prescribed respect for native religion, and for native customary law regarding the holding of land, marriage, and other personal rights, subject to any British laws in force in the territory.³ At a later date, Part V of the Order in Council of 1898, which created a legislative council, reserved to the High Commissioner special powers relating to the settlement of natives on the land; further, he could refer any question relating to natives to a judge of the High Court, and could act as

¹ Proclamation 28 of 1923.

² Proclamations 9 of 1928 and 5 of 1935.

³ Charter of Dec. 19, 1889, sects. 13-15.

he considered fit on the report received. A Secretary for Native Affairs was to be appointed; the selection of this, and of all other native affairs officials, was to be subject to the approval of the High Commissioner. It is of even greater importance that the Order in Council laid down that the company could not impose any disabilities on natives which did not apply equally to Europeans, without the consent of the Secretary of State, save in respect of the supply of arms, ammunition, and liquor. These provisions may be taken to indicate an intention to reserve to the High Commissioner the right to protect native interests, and also as an expression of the desire to control differential legislation of the type which had already become a feature of South African policy. Some of the problems which arose from the dispossession of natives from lands required for colonization, and the manner in which they were dealt with during the company's administration, are described in another chapter.¹ When the terms of the Southern Rhodesian Constitution of 1923 were being debated, the question of native rights in the unallotted lands had already been dealt with by the Privy Council;² the question of the general control to be exercised over natives, estimated to number 800,000, by a responsible government representative of a European population of 34,000, was referred for examination to a committee presided over by Lord Buxton.³ The committee considered that, if the new government was to be given responsibility for native affairs, the constitution should provide for a control similar to that exercised over the former company administration, or to that exercised by the Crown in the constitution giving self-government to Natal in 1893. Thus the provisions of the 1898 Order in Council relating to native affairs were maintained, the High Commissioner was given special authority in this respect, and the Governor was required to forward to the High Commissioner any information he might demand. The policy which dictated the insertion of these provisions also resulted in keeping open to natives the right of franchise.⁴

¹ See Chap. XII, pp. 732-8.

² *Ibid.*, p. 734.

³ *Report of a Committee Appointed by the Secretary of State for the Colonies to consider certain questions relating to Rhodesia*, Cmd. 1273, 1921.

⁴ For the position of the High Commissioner in regard to native affairs and the native franchise, see Chap. VI, pp. 157-60.

From the beginning of responsible government native policy has tended towards the system of territorial segregation which has been developed in South Africa. In 1921 proposals were made to the Colonial Office that the High Commissioner should set aside specific areas in which alone natives might acquire land, and the inquiries of the Land Commission of 1925 were largely directed to finding some practicable means for achieving a territorial separation of the European and native population.¹ Legislative measures intended to enforce segregation have not been as extensive as in the Union, partly because the larger areas assigned to natives already provide some measure of separation between the two races, and make unnecessary any considerable re-allotment of land. The 'civilized labour' policy exists in principle,² but in the absence of any large 'poor white' community and of large industrial organizations it is less conspicuous than in South Africa.³ There is, nevertheless, a considerable body of differential legislation.⁴ The Land Apportionment Act of 1930 restricts native and European holding of land to separate areas,⁵ and the native 'squatter' is in process of being removed from European lands;⁶ the movements of natives are regulated by a pass system;⁷ the Native Urban Locations Ordinance of 1906 with its subsequent amendments controls the entry of natives to urban areas, and its provisions have been reinforced by the recent Registration of Natives Act;⁸ the Industrial Conciliation Act of 1934, which incorporates much of the previous legislation regarding labour disputes, and now practically regulates trade union operations, excludes natives from its scope;⁹ the Maize Control Amendment Act 17 of 1934 provided different marketing systems for native and European producers. The separate taxation of natives under a poll-tax system is of course a common incident in African territories, and is based on fiscal rather than racial considerations.¹⁰

In regard to the organization of conditions in native areas, the larger provision of lands for native occupation, and for their future

¹ See Chap. XII, pp. 735-6. ² See Chap. XI, pp. 682 ff. ³ Ibid., pp. 689-91.

⁴ See Fr. A. Burbridge, S.J., *A Review of Five Years Native Legislation*, 1935.

⁵ See Chap. XII, pp. 736-8.

⁶ Ibid., p. 804.

⁷ Native Pass Consolidation Ordinance, 14 of 1933. See Chap. XI, p. 669.

⁸ See below, p. 511.

⁹ See Chap. XI, p. 691.

¹⁰ For native taxation, see Chap. X, p. 562.

extension, distinguishes the land policy of Southern Rhodesia from that of the Union. But the improvement of the condition of the reserves seems to demand a more liberal expenditure than the Rhodesian government has yet provided for it. The resources of the Native Trust Fund,¹ constituted in 1924 for the development of the reserves, are derived mainly from rents of trading sites, and are by no means considerable; the receipts in 1935 were only £5,286; and the government has never set apart any definite share of the proceeds of native taxation for expenditure in native areas. During 1936, however, Parliament voted £13,138, together with an additional loan of £22,000, for increasing water supplies and soil conservation in the reserves.²

The apparent disintegration of the Shona tribes after their subjugation by the Ndebele, and the defeat of Lobengula, who appeared to be the only powerful native authority, left on the first administrators an impression of general disorganization. The Matabele war and rebellion afforded an argument against attempts to restore the position of the chiefs, whose status was not clearly defined till the Native Affairs Ordinance of 1910 granted them powers in terms closely resembling those of the Natal Code; they ranked as constables responsible for law and order within their tribal areas, and in addition were required to assist in the collection of tax. The Native Affairs Act of 1927 confirms and slightly increases these obligations, but it is noticeable that a number of powers normally exercised by chiefs under native customary law, such as the allocation of land, are specifically reserved to native commissioners. In practice the use made of chiefs would seem to vary widely, and is everywhere largely of an informal character. Small payments are made to them as salaries. Native criminal law has not been recognized; some degree of recognition has, however, been given to native civil law. The Order in Council of 1898 laid down that in civil cases, courts should be guided by native law, so far as it is not repugnant to natural justice or morality or to statute law. The possibility that difficulty might arise in regard to the recognition of native marriages was obviated

¹ *Statute Law of Southern Rhodesia*, 1924, p. 357.

² B. Grimston, 'Native Affairs in Southern Rhodesia during 1936', *Race Relations*, vol. iv, no. 1, 1937, p. 22.

by a special declaration that polygamous native marriages might be regarded as valid. It may be added that while these provisions have served to prevent some of the anomalies which in South Africa marked the earlier treatment of native domestic law,¹ in Southern Rhodesia this law has been modified in important respects by statute, and through the interpretation placed upon it by the High Court. Attempts have been made, with somewhat unfortunate results,² to prevent by legislation the practice of child-marriage; the law forbids the pledging of children in marriage, and penalizes the use of compulsion to force native females into an unwilling marriage,³ and the courts have held that bride-price is only incidental to, and not an essential element in, native marriages.⁴ Up to 1937 the only courts administering native law were those of the native commissioners; the chiefs had no judicial powers, though they acted as informal arbitrators in minor civil disputes. But the omission to grant them any effective power progressively affected their utility even as arbitral courts, and it was officially suggested in 1935 that 'we have waited too long if it was our intention to establish native tribunals'.⁵ However, in 1937 an Act⁶ was passed by the legislature to allow native courts to hear cases between natives in matters capable of being decided according to native law and custom. Native courts are given no jurisdiction in actions in which the dissolution of a marriage is sought, or in matters which are punishable in the European courts as an offence. They have no criminal powers and are under the supervision of the native commissioners, who may rehear cases or alter or quash judgements.

The declining prestige of traditional authorities, on the one hand, and the influence of the Union policy of developing local representative institutions on the other, point to the adoption of the council system as the probable line of development in Southern Rhodesia. Article 47 of the Constitution of 1923 provided for the institution of native councils in the reserves. The 1925 Land Commission⁷ assumed that such councils would gradually come into

¹ See Chap. VII, p. 268.

² See C. Bullock, *The Mashona*, 1927, p. 330.

³ Native Marriages Ordinance, 1917, as amended by Act 16, 1929.

⁴ *Muchenje v. Kunaka* (1912), S.R. 207.

⁵ *Report of the Chief Native Commissioner*, 1935, p. 16.

⁶ No. 33 of 1937.

⁷ *Report*, C.S.R. 3, 1926, para. 325.

existence, in which case some of the functions of the Native Land Boards in the reserves might be transferred to them, but in the same year the Commission on Native Education¹ stated its opinion that natives were not yet fit to carry out the duties of such councils. In 1927, however, a conference of native commissioners advocated the adoption of the council system, and in 1930 it was decided, as a first step, to substitute for the meetings of chiefs and headmen, hitherto periodically summoned by native commissioners, a series of informal advisory boards which would include an equal number of elected members and of chiefs or headmen, with the native commissioner as chairman. These boards have been given no legal status, and in 1933 the Prime Minister doubted whether the natives were yet capable of understanding the process of election.² The village boards seem to have had some value in providing for an exchange of opinions with officials, but have had little real vitality; the Chief Native Commissioner,³ referring to their listless attitude, ascribed it to their lack of positive functions. More lately, however, it has been decided to make a fresh effort to develop the council system; it was announced in 1936⁴ that councils would be established wherever possible in 1937, and as a preparation for this measure a course of training for chiefs has been initiated at Dombashawa.⁵ An Act passed by the legislature in 1937⁶ provides for the establishment of these councils in the native reserves or in the native areas, where the natives apply for permission to form them. They will consist of chiefs or headmen appointed under the Native Affairs Act of 1927, and other natives approved by the Governor. The native commissioner is to preside. They will have power to carry out development work in their areas in connexion with water supplies, timber, and roads, also such matters as education, housing, and the improvement of stock. They may make by-laws in connexion with these works. Revenues derived from grants or fees are to be administered by the native commissioners who exercise the executive powers of the councils.

¹ *Report*, C.S.R. 20, 1925, p. 115.

² *Debates of the Legislative Assembly*, vol. xiii, 1933, c. 526.

³ *Report of the Chief Native Commissioner*, 1935, p. 10.

⁴ *African Observer*, Jan. 1937.

⁵ See Chap. XVIII, p. 1229.

⁶ No. 38 of 1937.

The constitutional provisions for control of the High Commissioner over the Native Affairs Department, and their recent relaxation, have been described.¹ The present Prime Minister, in order to mark the importance attached by him to native development, has himself assumed charge of the Ministry for Native Affairs. At the end of 1927 a separate Department of Native Education was created, but, with the passing of the Native Development Act of 1929, education came under the charge of the Native Development Department, which had as its function the performance of all work concerned with native development; in this capacity it also took charge of agriculture in native areas. This created some difficulty with the Native Affairs Department, and in 1936 the control of the Chief Native Commissioner, who is also Secretary for Native Affairs, was extended to cover all native affairs; education was treated as a separate branch of the Native Affairs Department, with its own Director of Native Education. Native agriculture under an agricultural officer, and native lands under an assistant director, are now also branches of the Native Affairs Department. There are thirty-two stations, each in charge of a native commissioner, and of seventeen sub-stations fifteen are supervised by an assistant native commissioner. There exists an advisory council on native affairs, consisting of the Chief Native Commissioner and three other members appointed by the Governor; it deals with such matters as are submitted to it by the Ministry of Native Affairs.²

Among the constitutional changes proposed in 1935 and 1936, but not accepted by the imperial government, were the repeal of the provision for the reservation of bills differentiating against natives and the relaxation of imperial control over the disposal of native lands.³

V. KENYA

If Kenya has been included in the same group as the Union and Southern Rhodesia,⁴ it is mainly on account of certain points of similarity in the procedure of native administration; it could not

¹ See Chap. VI, pp. 157-60.

² Government Notice, Feb. 13, 1930.

³ *Proposed Amendment of the Southern Rhodesia Constitution*, Cmd. 5218, 1936, p. 6.

⁴ See above, p. 346.

with justice be said that the general policy of the Kenya government has the characteristic features presented by the two other countries. Whatever views may have from time to time been put forward by settler interests, and whatever the influence which these views may have had on the course of administration, the declared policy of the government must be taken to be that laid down in the various state documents to which reference has been made in Chapter V.¹ Much of the discussion which has arisen on political issues has had its origin in the problem created by the presence in Kenya of a large Indian population,² and it is possible that, but for this fact, the issues which concern the African population might have attracted less public attention. But the controversies first aroused by this problem stimulated a general interest in all questions concerning the non-European population; there was indeed a time when the position adopted by the British government towards native questions in Kenya was regarded in many quarters as a test of its native policy in the African dependencies generally. If to-day Nigeria and Tanganyika have also come within the sphere of public interest, Kenya still retains something of a special position.

The influence of European farming interests on Kenya policy has been exerted through the official and unofficial channels described earlier;³ it is true to say that, at certain periods, these interests have exercised an influence on policy hardly less than that which they might have attained under a fully developed form of responsible government. It is important, therefore, to realize the outlook of this section of the European population. It constitutes a comparatively small community, the actual number of land occupiers in 1934 being 2,027 out of a European population of 17,000, and embraces a proportion which, unlike most of the farmer element in South Africa, does not look on the land as the sole means of support for itself and its descendants; to this extent its interests may be said to be divided between Europe and Africa. Its concern, therefore, is primarily to safeguard European ownership in the Highlands area, in which its capital is invested, and to maintain an economy that will serve the standards of life of the class which it represents.

¹ Pp. 135-7.

³ See Chap. VI, p. 166.

² See Chap. VIII, pp. 335 ff.

It is true that, beyond these personal interests, it seeks to see Kenya as part of a predominantly British belt extending through East Africa; but though this may affect its general outlook on the part eventually to be taken by non-Europeans in the government of the country, it has had a less important influence on the current policy relating to native affairs. Circumstances have not produced the conflict of interests between the European and African which has marked industrial development in the Union; if there has been any conflict with European interests it has arisen from the position claimed by Asiatics in the political field and in regard to land settlement. In the industrial sphere the settler community has supported the tendency of Africans to replace Asiatic skilled labour.¹

These considerations explain in great measure the nature of the differential legislation applicable to natives; it deals primarily with the place of the native in the European farming areas, and has only in a minor degree been influenced by apprehensions of the result of contact in the industrial and social field. The procedure adopted for securing the highland area for European occupation will be described in Chapter XII.² It has had an interesting corollary in the legislation against the native 'squatter' on European farm lands.³ The Native Authority Ordinance of 1912 gave district officials the right to move back into the reserves all natives occupying unalienated Crown lands outside them if they belonged to tribes for whom land had been set aside, the main reason given for this measure being the prevalence of stock theft. As regards 'squatters' on private farms, the practice of 'Kaffir farming' was condemned by the Native Labour Commission of 1913,⁴ and prohibited by the Resident Natives Ordinance of 1918, which introduced provisions regulating the status of the labour-tenant, on the lines of legislation in South Africa; under the terms of this ordinance the contract may be for a period of not more than three years and must bind the tenant to work not less than 180 days a year for the owner. It was proposed in 1924 that the Governor should be empowered to waive 'in the public interest' the condition that remuneration must be in money, but this proposal was

¹ E. Huxley, *White Man's Country*, vol. ii, 1935, p. 180.

³ See Chap. XII, pp. 754-5.

² Pp. 742-55.

⁴ *Report*, p. 328.

negated by the Secretary of State. There was at first a tendency to secure as large a supply as possible of labour of this type, but in recent years it has met with disapproval for reasons similar to those which influenced South African policy regarding the tenant; there are complaints that he grazes too many head of stock to be an economic asset, that he is usually an inefficient worker and does not work for the full contract period, and that he is the cause of natives congregating on the farms, a practice which facilitates thefts of stock: also, owing to economic depressions and the need for soil conservation, mixed farming is more frequent and land once used for squatting is needed for pasture. A law was passed in 1933¹ dealing with stock theft by natives, which provides for the payment of a fine by a family or village when the offender is unable to pay. The history of the efforts made at various times to secure official assistance in recruiting farm labour is given in Chapter XI,² where an examination will also be found of the present system followed in regard to recruitment, pass laws, and the registration of natives. It may be added here that under the Vagrancy Ordinance³ special penalties may be imposed on natives who have left their reserves without permission after having been committed there for vagrancy. The regulations for the control of natives in urban areas are described in the last part of this chapter. The marketing of native produce has lately been made the subject of special legislation,⁴ but though the measure is differential in form, its main objective is to improve marketing facilities for native crops, and its terms resemble those of ordinances introduced in Uganda and Tanganyika.

The range of differential treatment is not, however, confined to legislation specially affecting natives; it is perhaps true to say that the influence of settler interests has in fact been seen even more conspicuously in the measures taken to support the European farming industry by reductions in railway freights on exports, or by the assistance given in the form of subsidies or loans.⁵ It may

¹ The Stock and Produce Theft (Levy of Fines) Ordinance, 18 of 1933.

² Pp. 640-2.

³ *Laws*, cap. 63.

⁴ The Marketing of Native Produce Ordinance, 28 of 1935.

⁵ See Chap. XX, pp. 1391. For a summary of the various subsidies paid see *Report on the Financial Position and System of Taxation of Kenya*, Colonial 116, 1936, paras. 52-3.

be said that this policy has necessarily reduced the resources available for expenditure on improvements directly affecting natives, a consideration which lends importance to the study made by Lord Moyne¹ in 1932 on the position of the finances of the colony and the recommendations made by him for the institution of a Native Betterment Fund. At one period the administration indirectly assisted the European coffee industry by placing obstacles in the way of the production of coffee by natives; administrative officers, though no legal sanction existed to prevent the growth of coffee in the reserves, discouraged the practice and in some cases induced natives to uproot bushes that had been planted.² Later experience in Tanganyika and elsewhere has shown that if native production is adequately supervised by the Agricultural Department it is possible to prevent the danger of disease, and natives are now allowed to grow *arabica* coffee on an experimental scale, under the Native Grown Coffee Rules, 1934.³ It is proper to add, that of recent years administrative policy has directed increasing attention to the economic and social needs of natives. Evidence of this will be found in the sections of this study which deal with conditions in the reserves,⁴ and the activities of the Health⁵ and Education⁶ Departments.

Kenya may be said to stand midway between South Africa and the countries with a developed system of indirect rule in regard to the use made of native authorities in administration. There is a greater recognition of the value of such authorities than is shown by the Union or Southern Rhodesia: on the other hand, Kenya, unlike the countries in which the system of indirect rule prevails, does not seek support for its administrative measures in the use of traditional institutions. In a memorandum⁷ defining its policy in native administration, the Kenya Government explained that it had avoided any abrupt departure from established native custom or tradition, and sought to stimulate progressive changes in the condition of native life by fostering any indigenous system of local

¹ *Report on Certain Questions in Kenya*, Cmd. 4093, 1932.

² *Report of the Agricultural Commission*, 1929, para. 144; see Julian Huxley, *Africa View*, 1932, pp. 54-7.

³ Issued under the Crop Production and Livestock Ordinance, 1926.

⁴ See Chap. XII, pp. 811-13.

⁵ See Chap. XVII, pp. 1165-6.

⁶ See Chap. XVIII, pp. 1246, 1252.

⁷ Quoted by Sir A. Pim in op. cit., Colonial 116, para. 199.

self-government that might exist. It stated, however, that the political organization of government before the British occupation was of a very nebulous character. The functions of government were performed to a varying extent by irregular chieftains and indeterminate councils of elders; their authority was precarious; 'nowhere in Kenya was there any chief who could command the respect accorded to the Kabaka of Uganda, nowhere was there any ready made organization which could be converted into an administrative machine'. This statement is of importance, for it illustrates the criteria which the government of a colony with a considerable European population is likely to apply in judging of the value of traditional institutions as a basis of native administration; it is clearly prone to take a more exacting view than one which is concerned only with the administration of a native population. Whatever the justice of the estimate which the earlier authorities formed of the possibilities of the native institutions which they encountered, the policy they adopted had the characteristics of a direct rather than an indirect type of administration. Three stages can be distinguished in the development of their policy: the employment of headmen, the creation of native tribunals, and the institution of local native councils.

The appointment of headmen dates from 1902,¹ when they were charged with the duty of keeping order, apprehending criminals, and maintaining public roads; a section empowering the administration to give them authority to try petty native cases was repealed by the Courts Ordinance, 1907. The Native Authority Ordinance of 1912 further empowered them to issue orders on such subjects as the control of liquor, the prevention of water pollution, and the spread of infectious diseases. The jurisdiction of a headman extended over a 'location', an area which was roughly coincident with that over which some chief or council was found to be exercising authority. The administration sought in the first instance to engage the services of members of well-known families, appointed after consultation with the councils of elders concerned, and it became habitual in Kenya to give the headman the name of 'chief', though in many cases headmen so appointed had no traditional authority. There has of late years

¹ The Village Headmen Ordinance, 1902.

been an increasing tendency to consult local opinion in making selections; the headmen are chosen in public meetings, and in some districts local sentiment supports the principle of hereditary succession; in others, however, efficiency appears to be the main requirement. At the outset they were paid stipends ranging from 240s. to 1,800s. a year, but experience showed the inadequacy of this remuneration, and the minimum salary was subsequently increased to 480s. a year. At one period it was contemplated that a council of elders might be collectively appointed as headman, and this was indeed done in the case of the Masai in Uasin Gishu, but with the subsequent growth of the council system the tendency has been to confine the work of headmen to that which can be entrusted to individuals. The headmen were not at first used in the collection of taxes, but they are now being increasingly utilized for this purpose, a practice which would seem to involve some hazard, in view of the low range of salaries given to them.¹ They have in effect constituted what was officially described in 1925 as a native administrative service,² but it is possible to trace some change of attitude on the subject in recent years. Opinions at the present appear to be divided between the alternatives of making a wider use of chiefs possessing the influence of traditional authority, and of appointing men who through their education or experience are likely to show greater capacity as agents of the administration. In some areas there has been no effective authority over a larger unit than a clan; but in others there are traditional chiefs who still have a strong influence over a tribe, and though formally recognized only as headmen and remunerated as such, they are nevertheless treated as the principal agents of the local district officer. The annual reports on native affairs make frequent mention both of the value of chiefs in settling disputes and of the importance attached by tribes to decisions regarding claims to the chieftainship; the internal politics of North Kavirondo seem to turn largely on the question whether or not a paramount chief shall now be created. In general, experience seems to show that, in spite of the past attitude of the administration in regard to the position of the customary chiefs, there are some who still retain

¹ See Chap. X, p. 572.

² *Address of Acting Governor, 1925, Legislative Council, p. 15.*

an authority which it is difficult for the 'appointed' headman to achieve, and it is possible that Kenya, while maintaining the headman system in some cases, may in others find it politic to give more definite recognition to the traditional chief and his council as a native authority for executive purposes. If so, it might be advisable to begin by making some distinction in the pay of official headmen and traditional chiefs, for the remuneration given to the latter appears inadequate to the position they even now occupy.

The institution of native courts dates from 1913, when the first action was taken under the Courts Ordinance of 1907. In criminal matters the courts had jurisdiction to try 'minor' criminal offences arising out of native law and custom, a term which, as is shown elsewhere,¹ has a somewhat wide interpretation; they could order imprisonment up to six months on a warrant signed by the District Commissioner, and impose such native forms of punishment as were not repugnant to natural justice. Their civil jurisdiction included all disputes which did not involve property valued at more than 2,000s. These provisions have been maintained in substance by subsequent ordinances.² The Native Tribunals Ordinance of 1930 provides that the courts should be constituted in accordance with native law, but in practice they take a variety of forms which in many instances appear to have little connexion with the customary system; in some districts the tribunal is established for a particular location; in others its jurisdiction covers a number of locations, and, under this arrangement, it is customary to form the courts from a panel of elders, representing the different locations, who preside in rotation. The members are appointed by government, one being made president. The Ordinance also provides for the appointment of native tribunals to be courts of appeal from lesser tribunals. Headmen, including hereditary chiefs, have no recognized place in the judicial organization, though as individuals they may be appointed to the tribunals; in some cases they are regularly so appointed; in others they are explicitly excluded from membership. Stipends at either daily or monthly rates are given to sitting members out of receipts from

¹ See Chap. VII, p. 288.

² Ordinance 39 of 1930, amended by Ordinances 35 of 1932 and 31 of 1933.

court fees, supplemented by grants from the local native councils. The system involves a measure of separation of judicial and executive functions which is novel in African society, and there is a further departure from ordinary custom in the fact that the 'divisions' in which tribunals exercise jurisdiction do not necessarily correspond with tribal or clan areas. While the constitution of the courts may render the members less amenable to outside pressure or bribery, it at the same time removes the tribunal from the immediate influence of local public opinion, and its proceedings cannot count on that measure of acquiescence which a traditional institution seems able to secure. Some of the tribunals appear to work with considerable success, but it is noticeable, and perhaps natural in view of the official attitude towards native institutions, that their work is subjected to a more critical estimate by officers of the administration than is usual in countries where the doctrine of indirect rule has found acceptance. The growing association with European conditions in certain areas has led to complaints from progressive natives that the elders are unduly representative of conservative and uninformed opinion; but it appears to be generally admitted that the tribunals, if of unequal merit, nevertheless provide, within the range of litigation with which they deal, a form of justice which is preferred to that of the magisterial courts. The Kenya police have no power to act in the native reserves, except in special cases, and the enforcement of law is in the hands of the tribal police.

The development of local government institutions, as represented by the institution of local native councils, is of more recent date. An Ordinance of 1924¹ provided for the creation of a council in an area which might be a district or part of a district; in 1936 there were twenty such councils. In one sense, the councils may be said to be, as in the Transkei, an extension of the normal administrative system; the District Commissioner is the *ex officio* president, and all executive functions vest in him.² The members are appointed by government, but before any person other than an official headman is appointed, the natives of the area are given an opportunity to submit a list of suitable persons among whom

¹ Native Authority (Amendment) Ordinance, 1924.

² Native Authority Ordinance, 1933.

nomination is made. The councils obtain their revenue, which is paid into a local native fund, from the levy of rates, ranging from 1s. to 2s., from land rents, fees and royalties on common minerals charged within the reserves, and from the share due to them from the Native Trust Fund constituted in 1921,¹ into which are paid fines levied under the Collective Punishments Ordinance; they do not receive native court fines, nor any share of general taxation. The total estimated revenue of all native councils for 1936 was £83,882, of which £47,573 came from rates.

The resolutions passed by the councils deal primarily with such matters as the provision of roads, cattle dips, and markets, the regulation of forests, of public health and education, and the use of land; but the law contains an important addition, which distinguishes the Kenya councils from those of South Africa; their resolutions, when approved by the Governor in Council, have the force of law. The councils therefore constitute a subsidiary legislative body whose powers are not confined to the passing of local rules regarding such matters as the preservation of forest areas, protection of grazing and the like, but are utilized to define and modify native customary law. Reference is made elsewhere to regulations passed in the Kikuyu and Kavirondo councils on the subject of transfers of rights in land,² and other resolutions have dealt with questions such as bride-price, initiation ceremonies, female circumcision, and the compulsory registration of marriages; in one instance they made provisions for the registration of births and deaths.

The constitution of the councils appears to differ from district to district; of their members, who usually represent the locations or headmen's areas, about half are nominated, and the remainder appointed after election. As in the case of the native tribunals, the area over which the council has jurisdiction does not always correspond with tribal boundaries, and sometimes represents a variety of native communities. In the study of these institutions contained in his report on the financial position in Kenya,³ Sir Alan Pim has pointed out that though the councils can claim no basis in native

¹ See Chap. XII, p. 752.

² *Ibid.*, p. 849.

³ *Op. cit.*, Colonial 116, p. 109.

custom they have an advantage in providing an opportunity for the representation of the younger and educated part of the community, for whom it is sometimes difficult to find a place in any traditional tribal organization. Their resources, as he points out, are small compared with those of native authorities in Tanganyika or Nigeria, which receive a share of the native tax levied by government; not only, as already shown, does government make no contribution of this nature, but on occasion it has placed on them burdens, such as the provision of school-buildings and famine relief,¹ which should normally have fallen on the general revenues of the colony. They are by their constitution so largely under official control that it is not easy to determine how far they are likely to constitute genuine organs of local self-government, or to provide that field for native political ambitions which many who supported their creation expected to see in them.² It detracts from their educative value that their executive powers are limited; most of the major works for which they vote funds are carried out by government departments. The system under which names are sent up for nomination is in effect a type of election by consent, and though it is not easy to say how far the process is affected by influence, in many cases the election is real. Some of the councils show a genuine interest in their local affairs, and in the more advanced tribes, such as the Kikuyu and Kavirondo, the members by no means always echo the views of the District Officer; in the backward tribes he is himself the council for all practical purposes. They have clearly had a function of some value in enabling the administration to introduce measures which, if imposed by direct order, might have had a less ready acceptance, and they have provided a useful organ for the expression of native views. The system, like that of the tribunals, has not been fully stabilized, but is undergoing a constant process of reorganization, aiming at the evolution of a form which corresponds more closely with the customary institutions and, at the same time, permits the discharge of the new functions imposed by modern conditions. As was remarked in dealing with the councils in the Transkei,³ the potentialities of

¹ *Op. cit.*, Cmd. 4093, p. 31; *op. cit.*, Colonial 116, pp. 109, 110.

² See E. Huxley, *op. cit.*, vol. ii, pp. 154, 287.

³ See above, pp. 372-3.

these bodies will only become apparent if official control of their proceedings is progressively withdrawn, and replaced by supervision from outside. It is meanwhile significant that there are in Kenya certain native organizations, of which the North Kavirondo Taxpayers' Association and the Kikuyu Central Association may be quoted as typical, which receive subscriptions from the public and incur certain expenditure on educational and other objects; this fact would seem to suggest that the councils fail to provide the means for self-expression of which more advanced sections of the population have felt the need.

It remains to notice the official organization for dealing with native affairs. A post of Secretary for Native Affairs was created in 1908 but abolished in 1912. Following on the recommendation made by the Native Labour Commission of 1912-13, a post of Chief Native Commissioner was created in 1918; his functions were partly executive and partly those of an adviser to government. His semi-independent position and the artificial distinction between non-native and native affairs which his office was held to involve have made his position the subject of some difference of opinion, but the Joint Committee on Closer Union¹ attached importance to the retention of his post, and the recent proposals for the reorganization of the head-quarters establishment in Kenya² envisage its continuance. With this exception there is no separate staff dealing with native affairs, though they are the predominant concern of the sections dealing with labour and the registration of natives. The local administrative staff (provincial and district commissioners) deal with both non-native and native affairs; their authority over the headmen, the native tribunals, and the local native councils is defined in the ordinances regulating these institutions. The technical departments of government deal similarly with both native and non-native affairs.

VI. THE HIGH COMMISSION TERRITORIES

If in South Africa the term 'native administration' must be interpreted as expressing the separate régime applicable to natives in a country governed primarily in European interests, in the High Commission Territories it has almost an opposite meaning;

¹ *Report*, H.C. 156, 1931, para. 87.

² *Op. cit.*, Colonial 116, pp. 56-78.

it describes the system of control exercised over the traditional native authorities who are mainly responsible for the internal government and administration of justice in an area where European interests are less important. There are considerable differences both in the basis of this control and the manner in which it is exercised, and consequently in the degree of independence left with the native authorities; and it will be necessary to trace briefly the steps by which the present position has been reached in each of the territories concerned.

(a) *Basutoland*

The history of the political relations with Basutoland has been given in detail by Sir Alan Pim in Chapter II of his report on that territory,¹ and it will be sufficient to refer here to certain critical points. The stipulations which Moshesh made in 1862, when discussing the terms under which protection should be extended to Basutoland, contemplated little more than political control: 'the Queen rules my people only through me. The man whom I ask from the Queen to live with me will guide and direct me.' He asked that magistrates should not be sent; the people were to be governed by native law, but if other laws were to be introduced they should come into effect only after they had been accepted by the council of the Basuto. The Basuto continue to read into these stipulations their own interpretation of their relations with the British government. The Proclamation of 1868, which annexed Basutoland to the Crown, admitted the Basuto 'into the allegiance of Her Majesty', and declared that they should be taken to be, for all intents and purposes, British subjects and the territory to be British territory; but at the outset relations were guided by the spirit of the discussions of 1862, rather than by any assumption that the British had acquired sovereign rights. In 1870 a Pitso or general meeting of the Basuto agreed to the appointment of two or three magistrates, the introduction of a code of law, which would conform as far as was reasonable to native usage, and the imposition of a hut tax of 10s.; the collection of the tax began in the same year, but considerable delay occurred in the appointment of magistrates and no code was promulgated. In 1871 the territory

¹ Cmd. 4907, 1935.

was annexed to the Cape Province, but with the proviso that legislative powers should vest in the High Commissioner. In the following year a new code, much resented by the Basuto, was introduced. It interfered with tribal customs in connexion with the status of widows and with initiation ceremonies, assigned to government the right of allotting land for cultivation, and provided for appeals from chiefs' courts to those of the magistrates, who had by this time been appointed. The grant of responsible government to the Cape in 1872 withdrew legislation in Basutoland from the control of the High Commissioner; but the change made little difference in the actual position in the territory until the extension of the Peace Preservation Act and the threat of disarmament were followed by the 'Gun War' of 1880-2. The cost of the campaign induced the Cape to invite the British government to resume control over the territory; the majority of a Pitso held in 1883 expressed itself as willing to accept the authority of the High Commissioner, and to pay taxes; in 1884 an Order in Council was promulgated which notified the Crown's assent to the Cape Bill dis-annexing Basutoland,¹ assumed direct imperial control, and restored legislative and executive power to the High Commissioner. In the same year Proclamation no. 23 was issued, empowering the High Commissioner to make by proclamation such laws as might appear necessary for the peace, order, and good government of the territory, and to appoint officers and magistrates.

This proclamation is the source of the authority now exercised by the Crown in Basutoland, and it is important to note the character of the regulations² issued in 1884 to give effect to its provisions. Save for provisions relating to marriages, hut tax, trade licences, and the sale of arms and liquor, they referred mainly to the control of judicial administration. The Resident Commissioner received full civic and criminal jurisdiction, and Assistant Commissioners exercised jurisdiction within the terms of their appointment; it was at the same time declared lawful for any native chief appointed by the Resident Commissioner to try civil or criminal matters within limits defined by the Commissioner. An appeal lay from the chief to a court composed of himself and

¹ i.e. from the Cape Province.

² Proclamation 2B, 1884.

an Assistant Commissioner, and thence to the Commissioner. The law therefore secured to the administrative officers a wide field of jurisdiction, limited only by administrative order, and proposed for the chiefs only a subordinate judicial authority. This provision was from the first strongly opposed by the Basuto; in practice chiefs were not formally appointed and all of them continued to exercise their customary jurisdiction. In effect this continues to be the practice to-day. In 1928 and 1929 proposals were drafted for defining the powers of chiefs and the organization of native courts; the chiefs objected to what was described as interference in the 'domestic affairs' of the Basuto, of a nature not contemplated in 1862, and the draft proclamations were never issued. The previous procedure has only been so far modified as to provide that under certain conditions a native may apply for his case to be heard first by the court of the paramount, and, in the event of unreasonable delay or refusal, by the administrative courts, to which an appeal lies in all instances.¹ The British courts have exclusive jurisdiction over certain criminal cases, such as murder, violence, and offences against arms and liquor regulations, and cases involving Europeans. It is an important feature of the system that there is no supervision of the chiefs' courts, save in so far as this may be implied in the existence of the right of appeal, nor is there any rule prescribing the form in which records, if any, should be kept by them. Basutoland is divided into 'wards', each under a hereditary chief. The chief sits with his Kgotla, an informal body composed according to custom; the courts apply customary law, as embodied in the Laws of Lerothodi;² though they cannot impose imprisonment they benefit by taking the fines imposed; the number of tribunals constantly increases owing to the system of 'placing' younger sons as new chiefs,³ and complaints regarding delays and miscarriages of justice frequently appear in the communications of the Resident Commissioners to the National Council and have been voiced in the National Council itself.

The judicial system is, therefore, in the nature of a dualism, and the same feature reappears in an equally significant form in the

¹ Proclamation 20 of 1930.

² See Chap. XI, pp. 609-10.

³ Op. cit., Cmd. 4907, p. 48.

executive field. On the one side, the system of native rule is represented by the paramount and his subordinate chiefs, over whom he has a measure of control that has varied with his own personality, but has a strong tradition behind it. The chiefs do not draw their powers from appointment or formal recognition by government; it would seem that in practice a chief can be punished only by the paramount, and 'removal' of a chief by the administration, if not accompanied by expulsion from the territory, would be ineffectual in the absence of any power to prevent his holding a court. Several unsatisfactory chiefs have recently been removed by the administration acting with the paramount chief. The administration has a direct hold over chiefs only through the payment or withholding of allowances, which in the estimates of 1935-6 stood at a total of £10,695. If the powers of the chiefs are anywhere defined, it is only in the Basuto Code of Lerothodi, and not by the administration; apart from the authority always implicit in the use of more or less unregulated judicial powers, the code gives them a wide power over the distribution and allotment of land. They derive their income from their own lands, for the cultivation of which they claim free service, from unregulated levies, and from judicial fines. The number of chiefs and sub-chiefs exercising judicial powers is said to be 275. Side by side with this system of Basuto authority there exists the machinery of the British administration which levies taxes and takes dues and fees, and provides communications, educational, medical and other facilities. The paramount is nominally responsible for the collection of the native hut and poll tax; the actual system is described elsewhere.¹ Where it is necessary to control health, veterinary, forest, or similar conditions, the Resident Commissioner has the option of calling on the native authorities to make these rules themselves, or of making them by regulation; in the latter case their penal clauses are enforced in the British courts. Thus the administration was able to induce the chiefs to pass rules about eradicating burrweed; but it had itself to pass regulations controlling cattle-disease.

Some effort to systematize the relations between the British and native authorities was made when the Basutoland National

¹ See Chap. X, pp. 558-60.

Council was instituted. This body grew out of the national Pitso, a general meeting of the men of the tribe of which the first recorded was in 1870; informal meetings were held at the suggestion of the Resident Commissioner between 1903 and 1910, and in the latter year a government proclamation placed the Pitso on a permanent basis.¹ It meets annually and is presided over by the Resident Commissioner; of its 100 members ninety-four are nominated by the paramount with the approval of the Commissioner, and five by the Commissioner directly. There has been a movement on the part of a Progressive Association, formed by the younger generation of educated Basuto, to secure a measure of elective representation, but so far it has only succeeded to the extent that the Commissioner nominates one member to represent it; both in form and in fact the Council is an association of chiefs, and has been conspicuously conservative in its outlook. Its most definite function is legislation on the subject of Basuto law. The Council in 1903 adopted the native code known as the Laws of Lerothodi, in effect an authoritative collection of customary laws, and has at subsequent dates made some modification in the code, though the conservative and partisan attitude of its members has prevented any change which would reduce the authority of chiefs; it has in particular strenuously resisted any definition or restriction of their judicial authority. Formerly it opposed the growing of trees, a measure essential to the arresting of 'donga' erosion, on the ground that tree planting may give the occupier a claim of user which may outlast the chief's lifetime; it resisted on the same ground the introduction of fencing.² But a new spirit is now at work and plantations and fencing are both accepted. The competence of the Council vis à vis the British authorities is limited to the passing of resolutions; it is within the discretion of the Resident Commissioner whether the budget estimates shall be referred to it, and taxes have on occasion, for instance in 1920, been raised against the wishes of the chiefs.

The disadvantages of this system of rule are obvious. It gives political protection, but divides responsibility; it provides for

¹ Proclamation 7 of March 31, 1910.

² L. Barnes, *The New Boer War*, 1932, pp. 64, 65; M. L. Hodgson and W. G. Ballinger, *Indirect Rule in Southern Africa: Basutoland*, 1931, p. 26.

intervention without defining its limits, or the principles on which it shall be made. Their history has given the Basuto a strong sense of nationality, and a firmly fixed ideal of Basutoland as a semi-independent state, which has accepted political control as the price of protection, but whose domestic affairs are, subject only to advice from without, to be regulated from within by the traditional authorities. Their ideal, therefore, is that of a constitutional position similar to that of the Indian State; but their circumstances are in fact entirely different. The Indian prince is, subject to the suzerainty of the Crown, sovereign in his own state; he is not hampered by the existence of a great number of lesser chiefs, each based on his own traditional authority and owing loyalty rather than feudal obedience to a paramount. The canons of good government are in India no longer confined to Europeans; an Indian prince not only has the requisite authority to adjust his administration to modern requirements, but, apart from any pressure from the suzerain power, he frequently has the stimulus of public opinion in his own state. In Basutoland not only can every reform be obstructed by self-interested chiefs, but reform itself has come to be viewed as an invasion of Basuto authority by an external power, and doubly so when it has to be introduced by regulation under the Proclamation of 1884. In the security afforded by protection there is a strong temptation for the chiefs to be more and more concerned with asserting their rights, and less mindful of their duties. On the other hand, the British authorities are prevented by a traditional policy of respect for Basuto institutions from applying that measure of external pressure which would normally be the remedy for this situation. In his analysis of conditions in Basutoland¹ Sir Alan Pim has shown that, apart from problems arising from its economic dependence on South Africa, there are questions of internal development, in the shape of agricultural, health, and educational improvements, which demand urgent attention. As he points out, a more effective administration, unless it is secured by supersession of the native authority, can only be achieved by the revision of a system in which the chiefs enjoy so large a measure of uncontrolled and undefined power. The council has little to recommend it as a potential organ of govern-

¹ *Op. cit.*, Cmd. 4907, p. 81.

ment. There is, as has already been said, a strong feeling of national cohesion among the Basuto, and perhaps the most acceptable form for the reorganization of native authority would be the centralizing of power in the hands of the paramount and his council by regulating the judicial and executive authority of the chiefs; it should be possible to secure, by the composition of the paramount's council and by the control exercised over it in its rule-making capacity, an instrument which could be progressively adapted to the needs of improved administration. One fundamental consideration, however, vitally affects the prospects of securing any agreed measure of reform. The tradition of independence is not merely a political sentiment; it has its origin in a history which has made the Basuto, not without reason, apprehensive of dispossession from their lands. Agreed improvement in the system of government will only be possible if they can be convinced that no change which may be made, either by the British government or by the Union if they come under its control,¹ will endanger their lands.

(b) *Swaziland*

The system of rule in Swaziland is also in form one of dualism; but the balance of forces differs from that in Basutoland. Whereas Europeans hold little land in the latter territory, in Swaziland the Concessions Partition Proclamation of 1907² and subsequent land transactions have left about two-thirds of the area in the hands of Europeans, who have also considerable mining interests.³ No less than 20,000 of the native population, or roughly one-sixth of the whole, is resident on lands held by Europeans; the native lands are comprised in some thirty-one separate blocks. Though the Swazi have a national sentiment, evidenced in particular by their efforts to combine for the repurchase of lands alienated to Europeans, by their opposition to any measure which appears likely to affect the security of the areas remaining to them, and by their efforts to secure a 'national' type of education,⁴ they do not constitute so strong a political unit as the Basuto. The

¹ See Chap. VI, p. 176.

² See Chap. XII, p. 729.

³ *Report on the Financial and Economic Situation of Swaziland*, Cmd. 4114, 1932, p. 15.

⁴ H. Beemer, 'The Development of the Military Organization in Swaziland,' *Africa*, vol. x, nos. 1 and 2, 1937, pp. 195 ff.

conventions of 1881 and 1884 between Great Britain and the South African Republic¹ guaranteed the independence of Swaziland; but in 1890, when a joint administration, representative of the British government and the South African Republic, was established over Europeans, a judiciary was instituted for dealing with European cases. In 1894 the South African Republic was given powers of administration under a convention² which provided that the management of the internal affairs of the natives should be in accordance with their own law and custom, administered by the native chiefs in their own manner, so far as consistent with civilized law and custom; it further provided for a hut tax, but limited its rate. A protocol of 1898 removed from the chief the right of inflicting capital punishment, and reserved for trial by European courts all offences of a serious nature. In 1903 an Order in Council entrusted the administration of the territory to the Governor of the Transvaal, who ruled through a special commissioner; the order indicated a policy of respect for native law, but confined the authority of the chiefs to the exercise of civil jurisdiction in purely native matters. Changes were made in 1904, but these may be neglected; in 1907, when responsible government was granted to the Transvaal, a proclamation giving effect to the Order in Council of December 1, 1906, which placed Swaziland directly under the control of the High Commissioner, introduced a system substantially the same as that in force to-day. The proclamation limited the jurisdiction of native chiefs to civil cases; an appeal lies from the decision of any chief to the paramount and from him to the Special Court;³ he may be called upon to give reasons for a judgement. The jurisdiction of the chiefs' courts is not further defined by law, nor are their proceedings supervised by the British administrative officers. All criminal cases are heard by the British courts.

Executive authority is also exercised by virtue of the Order in Council of 1906 and the Proclamation of 1907; but a distinction is observed in the administrative treatment of non-native and native affairs. In 1921 an advisory council was instituted to assist the administration in purely European matters; it has nine elected members, and the budget and draft legislation are referred

¹ Sir E. Hertslet, *The Map of Africa by Treaty*, vol. i, p. 254.

² *Ibid.*, pp. 255-7.

³ Proclamation 63 of 1934.

to it. In regard to purely native affairs, the position of the traditional authorities is not anywhere defined; no administrative duties appear to have been formally imposed on the chiefs, although since 1930 their help has been enlisted in the collection of tax and the registration of native customary marriages. The budget provides an average of £1,600 a year on allowances to them; a Proclamation, No. 7 of 1927, subjected their power of raising money levies to the sanction of the administration.

The Swazi meet annually in a general assembly, but this meeting has not been given the same constitutional position as the National Council in Basutoland; it is, however, the custom for the Resident Commissioner to keep in informal communication with the paramount and his council, and since 1931 they have been consulted on the disposal of the Swazi National Fund, instituted by Proclamation 24 of 1911 for native education and the improvement of agricultural conditions. The fund is financed by a sum of 2s. deducted from every native poll tax collected and from rents of native grazing areas; the estimated revenue in 1932-3 was £2,650. A practice was also instituted of holding monthly meetings in each district of all the chiefs, under the presidency of the local administrative officer. Committees, elected at informal public meetings, have been formed to represent the views of educated natives and coloured persons on current questions; they meet twice yearly at head-quarters for discussion. The system appears to depend on informal understandings rather than on regulations, and it is possible that any more systematic scheme might present questions of some difficulty owing to the necessity of serving both European and native interests. On the other hand, the present system does little to stimulate a sense of responsibility in the Swazi, and economic developments seem to be producing a progressive disintegration of such traditional institutions as still exist.

(c) *Bechuanaland*

The circumstances which have determined the course of native administration in Bechuanaland differ from those both of Swaziland and Basutoland. While there are in Bechuanaland considerable European interests, as represented by the farms on the

eastern border, including the Tati District (controlled by the Tati Company), the Lobatsi, Gabarones, and Tuli blocks (the last two controlled by the British South Africa Company), and the Boer settlement at Ghanzi near the border of South-West Africa, European and native lands are not interspersed as in Swaziland; it is possible to separate European and native interests in considerable measure. There is, on the other hand, little of the sense of nationality which characterizes Basutoland and to some extent Swaziland; the ruling tribes now known as the Bechuana derive from a common stock, but are politically independent of each other, and there is no paramount chief or national organization. The native reserves¹ do not contain single tribes, but sections of different tribes subordinate to a ruling tribe. Though the extent to which these sections have been incorporated in the ruling tribe within a comparatively short period is evidence of the unifying effect of the African tribal organization, yet the cohesion is by no means complete, and there is frequently a difference in status between the members of the ruling and subordinate tribes. The crucial problems of administration arise, however, less from these conditions than from the exercise of their political authority by the chiefs, accentuated by the growing extent of the migration of labour from the southern reserves into the Union.²

The absence of any symbol of national unity gives a less marked impression of dualism in the administration than is presented by Basutoland. As there has been some controversy as to the nature of the rights exercised by the Crown in the protectorate, it is of interest to mark the stages by which the present position has been reached. In 1876 Khama, the Ngwato chief, applied unsuccessfully for the protection of Great Britain. In 1884 Sir Charles Warren was given a commission to act on behalf of the Crown in Bechuanaland; but his authority was limited to restoring order and securing the territory against incursions from the Transvaal. The Crown concluded treaties with the chiefs of two southern tribes, the Thlaping and Rolong, which gave it full jurisdiction to

¹ See Chap. XII, pp. 730-2.

² *Financial and Economic Position of the Bechuanaland Protectorate*, Cmd. 4368, 1933, p. 31; M. L. Hodgson and W. G. Ballinger, *Britain in Southern Africa (No. 2) Bechuanaland Protectorate*, p. 17.

publish laws and appoint magistrates in their area; and when in 1885¹ it extended British jurisdiction over Bechuanaland, it made a distinction between the territories of these two chiefs and the rest of the country. Their territories were shortly after constituted a Crown colony, and in 1895 annexed to the Cape as British Bechuanaland; elsewhere jurisdiction was assumed only over British subjects. Great Britain did not regard itself as having sovereignty in the area now included in the protectorate; the High Commissioner on January 23, 1885, wrote that as the position of the Crown there did not amount to sovereignty the waste lands were vested in the chiefs and not in the Crown, and this view was accepted by Lord Derby as Secretary of State in a letter of May 14, 1885. In the same year Sir Charles Warren had discussions with the chiefs of the Ngwato, Kwena, and Ngwaketsi. The first two stipulated that if administration were extended, the native law against intoxicating drinks, and also that declaring native lands to be inalienable, should be maintained, adding that they would not refuse advice but wished to rule over their own people. The dispatch of the Secretary of State of August 13, 1885, however, refused to accept any responsibility for administering the area held by these chiefs; he stated that a large proportion of the country north of the Molopo was unsuitable for European settlement, and while recognizing the importance of the trade routes, Great Britain was interested in it to a very limited extent. The Kwena chief was told by the Administrator of British Bechuanaland that the protectorate meant only defence against foreign encroachment; 'you are still chief over your own town and people as before'; a reply which was approved by the British government in March 1886. Similarly the Ngwato chief was told in 1887 that he could not claim assistance in settling his internal troubles; 'he is an independent chief'. The first Assistant Commissioner sent to Bechuanaland in 1887 was instructed that he was to assist the chiefs to repel the invasion of their territories by outsiders, but to abstain from interfering with native administration; the chiefs 'are not understood to be desirous to part with their rights of sovereignty, nor are her Majesty's Government by any means anxious to assume the responsibilities of it'.²

¹ Order in Council, Jan. 27, 1885.

² Imperial Blue Book C. 5237, 1887.

The conception underlying the original theory of a protectorate depended for its operation on the protecting power finding a strong political organization in existence; here, as elsewhere, it broke down when no such conditions were encountered. In 1890 the Foreign Jurisdiction Act was passed, and on May 9, 1891, an Order in Council was issued under it, authorizing the High Commissioner to provide by proclamation 'for the administration of justice, the raising of revenue, and generally for the order and good government of all persons'; in issuing proclamations he was instructed to respect native custom, so far as it was compatible with the 'due exercise of her Majesty's power and jurisdiction'. The terms of the dispatch of May 15, 1891, which accompanied the order are important. They directed that jurisdiction should be confined so far as possible to Europeans, leaving the native chiefs and persons living under their tribal authority almost entirely alone; 'for the extent of jurisdiction exercisable by her Majesty over the natives has not yet been accurately defined'. The proclamation of June of the same year provided for the appointment of magistrates whose jurisdiction was confined to Europeans or cases involving natives of different reserves, but in the interests of peace it could be exercised in matters concerning inhabitants of the same reserve. When the discretionary jurisdiction was assumed, the magistrate was to follow the law and custom of the natives concerned so far as they were not opposed to peace, order, and good government. The Order in Council of 1891 is still the authority upon which the High Commissioner acts in issuing proclamations. Whatever doubts were at first felt as to the extent of the jurisdiction conferred over natives by the declaration made under the Foreign Jurisdiction Act,¹ no doubt now exists as to the competence of the government to exercise the fullest legislative authority. This position has been twice substantiated by the courts in Bechuanaland itself.² A protecting power may find itself limited by treaty or other form of commitment in the extent to which it can properly exercise its authority, but there was in this case no treaty restraining the Crown from intervention, to any extent

¹ See Chap. VII, p. 272, and Chap. XII, p. 799.

² *Rex v. Crewe, ex parte Sekgome* (1910) 2 K.B. 576, and *Tshekedi Khama and Bathoen Siepapitso Gaseitsiwe v. The High Commissioner, Special Court of the Bechuanaland Protectorate*, Lobatsi, 1936.

which policy might dictate, in the sphere of authority exercised by the chiefs. The various declarations made up to this point constituted statements of the policy of the protecting power rather than commitments to the chiefs; but in 1895 the British government made an announcement which was clearly meant to imply a definite engagement to them. The government had shortly before declared itself in favour of handing over the administration to the British South Africa Company. The three great chiefs, Khama, Sebele, and Bathoen, came to England to protest, and in spite of a discouraging reception, their insistence won from Mr. Chamberlain an agreement that, if they gave up the strip of land needed for the construction of the Rhodesian Railway, they should remain, as they had asked, under the administration of the British Crown. The Colonial Office letter of November 7, 1895,¹ which announced this settlement went on to say that the three chiefs would 'have a country within which they shall live, as hitherto, under the protection of the Queen. . . . The chiefs will rule their own people much as at present. . . . The Queen's officer will decide all cases in which white men, or black men who do not belong to the tribe of one of the three chiefs, are concerned, or in which the punishment is death. He will also have a right to hear an appeal in any very serious case, even if the punishment is not that of death. The people under the chiefs shall pay a hut tax, or tax of a similar nature, but, as the chiefs wish it, they may collect it—at all events for the present—themselves and pay it over to the Queen's officer.'

This settlement cannot be regarded as constituting in the legal sense a condition on which the chiefs surrendered their jurisdiction, for they had been under British protection for some years when it was made; at the most, it could be treated as a condition on which they agreed to give up the railway lands; but it was nevertheless the first occasion on which the character of the powers assumed by the Crown had been explicitly discussed with the chiefs, and it has not unnaturally been treated by the Bechuana as a pledge binding on the British government. It is therefore of interest to examine the extent to which Crown rule since 1895 can be said to have conflicted with any commitment then made. The action

¹ Quoted in the *Explanatory Memorandum on the Bechuanaland Protectorate Native Administration and Native Tribunals Proclamations*, 1934, p. 2.

taken in regard to native lands is described later;¹ it has not anywhere been claimed that the tribes have since been deprived of lands in the interests of European colonization. The judicial system in force up to the issue of the Proclamations 74 and 75 of 1934, to which reference will subsequently be made,² encroached only to a minor extent upon the jurisdiction of the chiefs. Under Proclamation 2 of 1896 provision was made for the transfer to the Crown courts of all charges of murder; under 3 of 1912 cases of stock theft were brought under their jurisdiction, though not excluded from trial by the chiefs; under 1 of 1919 appeals against the decision of chiefs were to be heard by a combined court composed of the magistrate of the district and the chief. A comparison with the extent of the powers left with native authorities in Basutoland and Swaziland will show how relatively wide was the jurisdiction thus left with the Bechuana chiefs. No system of supervision was introduced over the tribal courts, other than that implied in the procedure for appeals. Trial in a chief's court, though in form a trial by the tribal council or Kgotla, has tended under modern conditions to leave the decision largely in the hands of the chief. The political organization of the Bechuana includes three types of councils; the first consists of a small privy council of relatives and trusted subjects who advise the chief on all matters of importance; secondly, a wider council comprising the hereditary headmen of the different wards, which was summoned in cases of emergency; and, thirdly, a full tribal assembly of the initiated men. There is evidence that this last body exercised an effective power under earlier conditions; it was regularly summoned, and all affairs of state were freely discussed; and since the tribes had a constant tendency to split up into sections under sub-chiefs, a head chief had every incentive to maintain his position by carrying the majority with him. All observers agree that the establishment of the protectorate, by affording the chiefs an alternative basis for their authority, has tended to make them less dependent on tribal assent and to give them a position of autocracy uncommon in Africa.

The chiefs, with the exception of those who have proved inefficient, have been made responsible for the collection of taxes, and

¹ See Chap. XII, pp. 730-2.

² See below, pp. 409-11.

in practice deal with cases of default.¹ Reference has been made elsewhere to the use made by the chiefs of the regimental system for securing personal services;² though generally reluctant to let their tribesmen go outside the territory to engage in wage-earning, they have on occasion assisted in recruiting those who were in arrears with their tax, or taken tribute from men on their return; and some of them receive also payments in respect of mining concessions and trading sites. It has been estimated that from various sources of revenue the Ngwato chief derives an annual income of approximately £7,000, the Kxatla chief £4,500, the Ngwaketsi chief £3,500, and the Kwenä £2,750;³ but Sir Alan Pim has noted that a considerable part of these revenues are ear-marked for tribal purposes, and it is open to doubt whether any substantial balance remains for the chief's own pocket. At the same time the administration is not in a position to exercise supervision over the expenditure of these revenues save in three reserves, where the whole or part of the tribal income has been taken over from the sole control of the chief. In the Ngwato reserve, moneys received in respect of a mining concession are paid into a trust fund, under the administration of five trustees, of whom three are appointed by the tribal council; in the other two reserves, the administration has taken control over the income owing to the incapacity of the chiefs.

In the general administration the Crown officers are responsible for the expenditure of the revenues derived from hut tax, customs duties, and other sources, and for carrying out the regulations issued from time to time in matters regarding health, cattle disease, and the like, breaches of which are dealt with by the magistrates' courts. In 1920 an advisory committee was created for European affairs, and a native advisory council was instituted in connexion with the administration of a native fund for local development, representing the proceeds of an additional tax of 3s., first imposed in 1919⁴ and raised in 1923 to 5s. The income of the fund in 1931-2 was £7,952. The proceedings of the Native Council have been robbed of some of their value by the fact that the Ngwato,

¹ See Chap. X, p. 560.

² See Chap. XI, p. 610.

³ M. L. Hodgson and W. G. Ballinger, *op. cit.*, p. 65, note.

⁴ Proclamation 47 of 1919.

who contribute 40 per cent. of the revenue, declined representation on it, though their chief attends the meetings as an observer.

This system remained in force until 1934. As will have been seen, it gave the Crown officers a limited jurisdiction in criminal issues, and influence, but not direct control in executive matters. In practice, an undefined authority of this nature can often best express itself in the giving of advice or the exercise of official influence; but the efficacy of this procedure depends largely on the personal factors existing on both sides. Whether or not the Crown officers have in the past always made the best use of their position, it is certain that a situation was created which militated against good administration. That some of the chiefs were responsible for grave abuse of their judicial powers and for a wasteful use of tribal resources was notorious, and the administration had no effective power of checking them. The difficulties encountered in improving the position of the Masarwa serf population¹ illustrate the extent to which they were able to obstruct measures of reform. On the other hand, the safeguards which earlier custom applied to the use made by a chief of his authority are tending to lose their force. All the evidence goes to show that the institution of chieftainship still commands great respect; but the growing autocracy of the chiefs, meeting in its turn a growing consciousness among tribesmen, the result of experience gained by them either in trading in European markets or as wage-earners outside the territory, was producing conditions which might have led to a disintegration of the tribal structure. If this structure was to be preserved, the only course which appeared open to the administration was to regularize the position of the chiefs, and to restore to their councils some of the position which previous custom had given to them; failing this, it was inevitable that there must be a progressive intervention by the Crown officers in judicial and administrative matters.

The former course was adopted in two Proclamations, Nos. 74 (Native Administration) and 75 (Native Tribunals) of 1934, the issue of which was accompanied by an *Explanatory Memorandum* from the High Commissioner, dated December 28, 1934. The Native Administration Proclamation confirmed in the chieftain-

¹ Op. cit., Cmd. 4368, p. 10.

ship all chiefs who were lawfully holding office, and gave legal sanction to the native laws of succession to chieftainship by providing that, in the event of a vacancy, the tribe assembled in Kgotla is to designate the former chief's successor, who will exercise the functions of a chief after he has been recognized by the High Commissioner and confirmed by the Secretary of State. The chief and his Kgotla designate the persons who under native custom are entitled to advise him as councillors, and their names are notified to the Resident Magistrate. Provision is made for cancelling the nomination or ordering the suspension of a chief by the administration, on proof of inefficiency or oppression; in this case an acting appointment is made in his place by the process above described; he may only be finally deposed by the tribe itself with the authorization of the High Commissioner after inquiry by the Special Court. As in Swaziland, the right to raise a levy is made subject to the consent of the Kgotla and the administration, and the conditions on which compulsory labour may be exacted are defined. There is a provision requiring the chief to exercise his authority in consultation with his councillors. The *Memorandum* indicated that it was desirable that this body should include not only those qualified by right of birth, but those also who were qualified by experience or education; while not making their appointment obligatory, the proclamation provides that the chief and Kgotla may designate as councillors persons who are not entitled under native custom to act as advisers. The chief may issue orders for purposes defined under eighteen heads. These include the regulation of the sale of liquor, prevention of water pollution and of bush fires, protection of roads and of game, regulation of the cutting of timber, locust extermination, collection of vital statistics, prevention of breaches of the peace, recovery of stolen property, and apprehension of fugitive offenders. Orders made within the terms of the proclamation carry a penalty to be enforced by the native tribunals; the Resident Magistrate is empowered, after consultation with the chief, to suspend the carrying out of any order.

The second proclamation creates tribunals of two classes. The senior tribunal consists of the chief (expressly recognized by warrant for this purpose) and members of his council nominated by

him, their names being duly recorded. The junior tribunals are presided over by a headman appointed by the senior tribunal; the headmen nominate persons to act with them on the junior tribunals. Members of tribunals may be removed by the magistrate after consultation with the chief and the Kgotla. The tribunals decide cases by native law, and inflict punishments allowed by native custom other than those involving death or serious physical injury; corporal punishment may be ordered within specified limits, but the sentence must be reported to the magistrate before it is carried out. Sentences of imprisonment exceeding two months must be reported to the magistrate, who may confirm or nullify them. Records are to be kept of all cases, and examined by the magistrate at least once in every three months. The magistrate, after giving the tribunal opportunity to show cause, may transfer any case to his own court upon the application of a party to the dispute, and may similarly try any case which it was necessary in the interests of peace that he should hear, but he should, except for stated reasons, then determine it under native law. There is a formal right of appeal from a junior to a senior tribunal, and from the latter to the Resident Magistrate.

The proclamations introduced into the Protectorate many elements of the system which has been applied to native institutions in areas under indirect rule. They give greater legal precision to the position of chiefs by laying down a procedure to be followed in their appointment and dismissal, and providing that the deposition of a chief may be effected only by the tribe itself with the government's consent;¹ but the Bechuanaland system differs from the form adopted in most areas under indirect rule in providing that the members of a chief's council must be explicitly nominated, and can be removed by the administration. Elsewhere the constitution of the chief's council has generally been left to the operation of tribal custom; it was held that the conditions in Bechuanaland made a definite appointment necessary; but in practice the administration does not require a full list of members to be submitted. The innovations were accepted by some of the chiefs, but Tshekedi Khama, the regent chief of the Ngwato, and Bathoen, the Ngwaketsi chief, not

¹ *Explanatory Memorandum*, op. cit., pp. 3, 4.

only stated their inability to comply with the terms of the proclamations, but contested their validity in a suit brought in the Special Court.¹ Apart from the technical ground that the proclamations were not covered by the terms of the Order in Council of 1891, it was claimed that they violated rights reserved to the chiefs by treaty, and were void on the ground of uncertainty and unreasonableness. The decision of the court was based on the legal ground that the jurisdiction of the Crown was unfettered and unlimited, and that the other issues raised did not therefore come into consideration. It is, however, clear that behind the suit lay an issue with which the court was itself unable to deal. The two chiefs have consistently urged² that the system of indirect rule conflicts in practice with its proclaimed aims; based on the 'recognition' of a chief which involves the definition of his powers, it constitutes an invasion of his inherent and traditional position as the embodiment of the tribe. The most suitable relationship in African conditions in their view is that of 'parallel' rule; they admit that the final authority must rest with the controlling power, but claim that internal administration should be carried on by the chief. That, however, was the position which the earlier administrators attempted to adopt in Bechuanaland; that it has proved to be impracticable is sometimes attributed to the lack of sympathy or consideration shown in personal relations between the Crown officers and the chiefs; but though some incidents may be quoted which support this view, the general policy of the administration has shown no lack of a desire to support the chiefs' authority. When two authorities with different standards of rule are operating in an undefined field of jurisdiction, it is not possible to avoid conflict, and both Basutoland and Bechuanaland have demonstrated the difficulty of a dualism which attempts at the same time to maintain unimpaired the traditional authority of native chiefs and to achieve a more progressive system of administration. The maintenance of customary native authority is not an end in itself; its justification lies in the extent to which it can be utilized as an instrument for promoting the general welfare. All

¹ *Tshekedi Khama and Another v. The High Commissioner*, see above, p. 405, note 2.

² See Tshekedi Khama, 'Chieftainship under Indirect Rule', *Journal of the Royal African Society*, vol. xxxiv, 1936, pp. 251-61.

experience goes to show that the best guarantee for the maintenance of traditional institutions in modern conditions lies in integrating them with the government institutions necessary to secure good administration; that policy does not necessarily refuse to admit that native authority may have an independent sphere of action, but it must be independence in a defined and regulated field. The alternative is the inevitable disintegration of the basis on which traditional authority itself exists.

VII. TERRITORIES UNDER INDIRECT RULE

The term 'indirect rule' has been applied to various systems of native administration; it is used here to denote the system by which the tutelary power recognizes existing African societies and assists them to adapt themselves to the functions of local government.¹ The characteristic difference between direct and indirect rule lies partly in the theory held as to the place to be assigned to traditional native authorities in administrative and judicial organization, partly in the use which is made of them; but the difference can be better appreciated by a study of the stages through which the present position has been evolved than by a discussion of principle.

The functions which modern colonial administrations have assigned to native authorities have been largely determined by the nature of the organizations which they encountered on entering upon their rule. In India the Indian states for a variety of reasons have never been brought under British administration; they have remained independent, with internal sovereign rights, under the suzerainty of the Crown. If in the areas brought under British administration little use has been made of traditional authorities as such, it was mainly because Great Britain succeeded to a state organization in which such authorities had no place. The Moghul system of rule, largely feudal in form, had a widely extended official organization, and the development of British administration amounted in effect to the progressive substitution of a new administrative and judicial personnel, more systematically regulated and with more clearly defined powers, for that which

¹ M. Perham, 'Some Problems of Indirect Rule in Africa', *Journal of the Royal Society of Arts*, vol. lxxxii, no. 4252, 1934, p. 690.

had previously existed; the task was the easier in that the British government found no difficulty in enlisting the services of qualified Indians whom it could associate in its executive and judicial activities. What would be described in African territories as the traditional native authority had largely disappeared; the social organization followed lines of caste rather than of tribe or clan, and caste had mainly a religious significance. Some observers,¹ whose opinion is entitled to great respect, have thought that greater recognition might have been given to the *panchayats*, or local authorities representing the village units, and that though in some areas the influence of a centralizing system had deprived them of their vitality, there were others in which they might clearly have been used with advantage as institutions of local government. The prevailing policy of the time was, however, in favour of a direct form of administration under the supervision of European officials, and the result was the development of direct official rule, drawing its authority entirely from the state, and extending not only over the general field of executive and judicial administration, but over the numerous activities connected with the improvement of material and social conditions. At a later stage policy was directed to the development of local government institutions, partly as an education in the responsibilities of government, partly in order to relieve the administration of the burden of some of its activities or to allow of their expansion by the aid of local taxation. The municipal and rural boards then created were bodies instituted for the purpose of taking over prescribed functions which the government had previously exercised through its own official organization; in the first instance they were constituted by nomination and given an official chairman, but are now, with few exceptions, developed organs of local self-government on an electoral basis, largely responsible for raising their own resources, and subject only to an external control which is defined by statute. In recent years an effort has been made to revive the *panchayat*, but with varying success; in many areas the village has so far disintegrated that the *panchayat* has no traditional support.

Historical developments gave a different character to the ad-

¹ See references quoted by Sir Donald Cameron in *Principles of Native Administration and their Application*, 1930, pp. 33-4, note.

ministration in the Dutch East Indies. From the outset the Dutch adopted a system of direct rule, save in about one-seventh of Java, where the native chiefs have much the same position as in India. Elsewhere the régime was once described as *le paradis des fonctionnaires*. After 1903, however, they adopted a policy of decentralization, four to six districts being combined under a Regent, usually a descendant of an aristocratic native family, with a council which usually includes two Europeans. Three to five regencies make a Residency under a European officer. The *desa*, the traditional village organization has, however, remained intact and is fully utilized; the village chooses its own headman and his council; he has, as headman, both administrative and judicial powers, and his jurisdiction has been confirmed by regulations which attach legal sanction to his decisions.

In the Federated Malay States the Residential system has left the traditional native authority of chiefs unimpaired in form, though the control exercised over them goes beyond the sphere of political relations and extends to their internal administration. In Indo-China the French have in Tonkin made but little use of native traditional authorities. The fundamental unit of their system of administration is the village, and considerable powers are given to the headman; but the headman and the village council have not the character of customary authorities; the headmen are elected, they are removable, and are paid by a commission on the collection of revenue. Above the headmen there are the usual grades of officials; the hereditary or territorial chiefs have no place in the administration. In Annam and Cambodia the former rulers have been retained, and ordinances are issued in their name; the countersignature of the Resident is, however, required to make them valid, and the chief officers of state are, in effect, heads of departments subordinate to the Resident.

The survey made of the course taken by native administration in South Africa has shown the extent to which use has been made of hereditary chiefs. Natal presents the only instance of a deliberate use of the tribal organization, but as will have been seen, this was not originally a policy of choice, but was adopted owing to the lack of facilities for direct official management. The system accordingly never developed on the lines which it might have taken had the

administration proceeded on a conviction of the inherent value of tribal institutions, and though in recent years more extended use has been made of the services of hereditary chiefs, in particular in a judicial capacity,¹ the trend of policy points to an expansion of the council system rather than to an increased use of customary institutions or tribal organization. The course taken in the High Commission territories and (as will subsequently be seen) in Barotseland² affords an interesting illustration of the difficulty of securing improvements in administration if an effort is made to maintain traditional authorities in substantial possession of their customary position, as an alternative to bringing them under regulation and control; in seeking a solution to this problem, the Crown authorities have in Bechuanaland and Barotseland adopted, though in different forms, a considerable measure of the procedure which characterizes indirect rule elsewhere.

VIII. NIGERIA

In the literature which has grown up on the subject of indirect rule it is usual to regard Nigeria as affording the best material for illustrating its characteristic features;³ and there is an added convenience in doing so, since the publication of Miss Margery Perham's recent work⁴ gives a full history of the development of the system in that territory, and a description of its working in practice. The history of the British occupation of Southern Nigeria, as she has pointed out, was one of reluctant and hesitating penetration;⁵ that of Northern Nigeria had a more definite element of conquest. Circumstances did not afford the Royal Niger Company an opportunity of undertaking administration on any extensive scale, but it is worthy of note that after the conquest of the Bida Emirate Sir George Goldie laid down the principle that the company should as far as possible 'rule indirectly through feudatory princes',⁶ and he clearly had in view the system adopted in India in dealing with the Indian states.

¹ See Chap. VII, p. 285.

² See below, pp. 456-60.

³ See L. P. Mair, *Native Policies in Africa*, 1936, p. 118; M. Perham, 'A Re-statement of Indirect Rule', *Africa*, vol. vii, no. 3, 1934, pp. 321 ff.

⁴ *Native Administration in Nigeria*, 1937.

⁵ See D. Wellesley and S. Gwynn, *Sir George Goldie, Founder of Nigeria*, 1934, pp. 25-6.

⁶ S. Vandeleur, *Campaigning on the Upper Nile and Niger*, 1898, p. 239.

'Even an imperfect and tyrannical native African administration, if its extreme excesses were controlled by European supervision, would be, in the early stages, productive of far less discomfort to its subjects than well-intentioned but ill-directed efforts of European magistrates, often young and headstrong, and not invariably gifted with sympathy and introspective powers. If the welfare of the native races is to be considered, if dangerous revolts are to be obviated, the general policy of ruling on African principles through native rulers must be followed for the present.'¹

When Lord Lugard was appointed High Commissioner in 1900 he had experience of the system followed in the Indian States, and of the Buganda Kingdom as well as of Nigeria; already in 1893 he had outlined for Uganda a system under which its internal control should be carried on through the existing chiefs.² He considered that, though in that particular instance the king had proved himself incompetent, nevertheless the Resident could and should rule through the chiefs. In Northern Nigeria Lugard encountered circumstances unusually favourable to the adoption of these principles. In the northern emirates the Fulani conquerors had established organizations which presented many of the features characteristic of the Moslem kingdoms in North Africa and Asia; centralized authority carried on its administration through officers who were in effect fief-holders; there was a revenue system involving a number of taxes, including the *zakkat*, the Moslem tithe on agricultural products, a plantation tax, the *jangali* on cattle, taxes on craftsmen and traders, death duties, tribute, market fees, and tolls on caravan routes. The supreme judicial power lay with the emir and his council, but in practice only issues of grave importance were tried by them, and the ordinary tribunals were presided over by *alkalis*, trained judges administering the Maliki Code of Moslem law. Their decisions were in the last resort appealable to the emir's court. Although, therefore, there was much in this system which the protectorate government might have to regularize and improve, it was one which could be readily adapted for use. The lack of official personnel no doubt formed an additional argument against any attempt to substitute a direct type of ad-

¹ Sir G. Goldie's Introduction to S. Vandeleur, *Campaigning on the Upper Nile and Niger*, 1898, quoted in D. Wellesley and S. Gwynn, *op. cit.*, pp. 165-81.

² *The Rise of our East African Empire*, 1893, vol. ii, p. 649.

ministration, but even if that had not been the case Lugard had good reasons for applying to the emirates the principles of native administration which he had suggested for Uganda. Though the position at first indicated to his own officers was that of Residents, 'charged rather with political than with strictly administrative functions',¹ he did not in practice leave the emirs in a position of independent rule and subject only to political control. From the first, there was a considerable measure of direct intervention. The Slavery Proclamation of 1900 abolished the legal status of slavery; the fief-holders who had previously lived as courtiers at the emirs' capitals were sent to their districts with the formal position of district heads; the Land Revenue Ordinance of 1904 and a Proclamation of 1906 modified the system of taxation.²

The action at first taken in regard to judicial matters was even more significant. While, as a normal result of the establishment of a protectorate, official courts were set up to deal with non-natives and offences against British ordinances, the law did not, as was done in some territories, assign to these courts jurisdiction over the more serious offences committed by natives; it left full criminal and civil jurisdiction over natives to the emirate courts, but it defined their jurisdiction and brought their proceedings under control. The members of the court were to be 'appointed by the Head Chief or Emir with the approval of the Resident', and the Resident was to have access to their proceedings with power to revise their decisions or transfer cases to his own court.³ In practice this left the bulk of the judicial work in the Moslem provinces in the hands of the emirs' and the alkalis' courts, while in pagan areas the political officers tried what cases they could, leaving the remainder to be decided by the customary processes. Under the Proclamation of 1906, 109 courts were gazetted, and nine were given capital powers subject to confirmation of the sentence by the Governor. In regard to revenues, the sums collected were at first treated as *kurdiñ sarki*, or moneys of the chief, and a share was taken by the government for general revenues; this was at first fixed at a quarter, and subsequently one-half,⁴ save in the case of

¹ *Instructions to Political and other Officers on Subjects chiefly Political and Administrative*, 1906, p. 1.

² See Chap. X, p. 577.

³ Proclamation 4 of 1900, *Gazette* no. 1, vol. i.

⁴ See below, pp. 421-2.

the Sultan of Sokoto who, as Sarkin Musulmi, was allowed to retain 75 per cent. of the general tax collected in his emirate. No control was exercised over the expenditure of the emir's share, but the subordinate chiefs, who had previously taken a share of the tribute from their fiefs, now, as district heads, received salaries in proportion to the amount of tax they collected. This measure was significant, as marking the abolition of the previous custom by which they retained as remuneration a part of the money that passed through their hands.

The study of this early stage of native administration in Nigeria is of unusual interest, since it reflects the application of a deliberate policy, put into operation from the first and steadily developed to meet the expanding needs of civilized government. The analogy which first suggested itself in Northern Nigeria was that of the Indian State; but this was clearly inapplicable in practice. As has already been remarked,¹ the treaties or other agreements concluded with the Indian States gave the rulers the status of sovereigns within their own territory; the relation of the Crown to the emir, on the other hand, resembled that of conquest, and as the steps taken in regard to their lands showed,² there was no intention to accord them sovereign rights. It was officially emphasized that their position was to be that of *Wakils* or Governors;³ they were held to have no inherent authority which they could enforce under native law and custom;⁴ nor apparently was it thought that circumstances permitted the practice by which the nominal authority of the ruler is maintained by allowing all orders effecting changes in the administration to be issued in his name; the revision of the system of taxation, for instance, and the reorganization of the tribunals, though they may have represented the result of agreement with the emirs, were effected by proclamation. Formal respect was, however, paid to the position of the emir as head of the native administration; district heads were held to be responsible to him, and orders to them were issued through him; an officer on tour was accompanied by the emir's representative, who was the mouthpiece of the orders communicated to subordinate

¹ See above, p. 413.

² See Chap. XII, pp. 768-74.

³ F. D. Lugard, *Political Memoranda*, 1918, p. 303.

⁴ Sir D. Cameron, *The Principles of Native Administration and their Application*, 1934, para. 29.

authorities. If the system adopted in the first stage of native administration in Northern Nigeria is compared with that in force in the High Commission territories, it presents the difference that, while respecting the position of the existing native authorities and making wide use of them, it regulated their powers and defined their jurisdiction. It did not, therefore, admit, as the Crown seemed by implication to admit in the territories, any dualism; there were not two sets of rulers, British and native, working separately or in co-operation, but a single government in which the native chiefs and the British officials¹ had defined positions. The system did not, on the other hand, treat the native authority merely as an agent or mouthpiece of the official administration, as was the tendency in the Union or Kenya; it laid, in effect, the foundation of that system of integrating the native institutions into the official system which is the characteristic feature of indirect rule as it is now understood.

The second stage in the development of native administration in Nigeria coincides roughly with the amalgamation of Northern and Southern Nigeria in 1914. It was marked by two important measures. The procedure of judicial administration adopted in the Northern Provinces was extended to the Southern, a step which had no little significance in the evolution of the system of native administration. The history of judicial administration in the Southern Provinces prior to the amalgamation presents a complicated record, involving a series of adjustments effected as the result of agreements made with different native chiefs. It is sufficient to note here that a system had grown up of which the chief feature was the wide extension of the authority of the Supreme Court; this body had nominal jurisdiction throughout the territory, but since its staff was small the gap was partly filled by appointing administrative officers as Commissioners of the Supreme Court, and by giving wide powers to native courts;² in order, however, to make this measure possible, the native tribunals were presided over by administrative officers who were empowered to appoint any person to act as president on their behalf. They were under the control of the Supreme Court, which heard their appeals, and the result was

¹ F. D. Lugard, *op. cit.*, 1918, p. 298.

² For these courts see below, pp. 431-2.

not merely that the native court lost much of its true character, through the presidency of an administrative officer, but that there was a general tendency towards the adoption of European conceptions of law and procedure. After the amalgamation of 1914, the original jurisdiction of the Supreme Court was restricted to a few centres with a large mixed population; a provincial court, staffed by administrative officers, was given jurisdiction over all other cases, subject to the review of capital sentences by the Chief Justice and an appeal to the Supreme Court in a certain class of civil cases. The native court system was brought into conformity with that of the north; the administrative officer ceased to preside, the criminal powers of the courts were reduced, and their jurisdiction confined to matters of native law and custom. The change was more than one of form. The institution of a provincial court, with an administrative personnel, was designed to regulate justice on lines better suited to African conditions than was possible in courts following strictly the principles of European law and procedure; the native court in its turn tended to assume its true character of a tribunal based on traditional usage, and transacting its business in the manner prescribed by native custom.

In the north it had been an essential element of the system of native administration to entrust the native authority with the disbursement of considerable funds;¹ revenues derived from the general tax had been shared between the emirs and government, and no provision was made for direct control over the expenditure of the emir. In 1910-11 the native administration share of a total internal revenue of £545,000, derived from all sources, was no less than £196,925. The appropriation of so large a proportion of the revenues of the territory to the native authorities was evidence of the spirit in which their position was envisaged; but the very extent of the resources left at their disposal was in itself an argument for introducing measures designed to secure that an adequate part should be spent on public purposes. Certain of the emirs were in the first instance persuaded to accept an allocation of funds on lines which gave them a 'civil list', and the system was progressively extended until the native treasury became a recognized and indeed a fundamental feature in native administration.

¹ See Chap. X, p. 577.

The agreed proportion of the general tax, which represented the consolidation of all previous taxes except that on cattle,¹ was now paid into the treasury; the salary of the ruling chief as well as that of the district heads and the headmen was placed on a fixed basis; the remainder was available for expenditure on public objects by the native authority, subject to the supervision exercised by administrative officers under the terms of the Native Authority Ordinance. The existence of a native treasury became the proof that a native authority had been recognized as a 'native administration'.

The development of indirect rule in the northern emirates involved changes in the practice rather than in the structure of a political organization which had itself no deep-seated roots in tradition. The difficulties it encountered lay for the most part in the adjustment of relations with the emirs themselves; and that they were so readily overcome was a tribute to the officers who evolved the system and to the good sense of the emirs. The pagan areas of the north, however, presented a different problem. In the 1931 census 33 per cent. of the population of Northern Nigeria was classified as pagan. Part of this population had been subjected by the emirs, but there were large groups which had retained their independence. Of the former some communities were not unwilling to accept a continuance of Fulani rule, expressed in the new form of a native authority recognized by government; but the major part resented an alien rule which supplanted their traditional chiefs or village councils by Fulani headmen, and when cases were brought to trial judged them under Moslem law. The emirate native administration was doubtless more efficient than anything the pagan village communities could supply; their organization was weak, and their own customary authorities had been largely suppressed under Fulani rule; but if native administration can achieve vitality only when it is based on the traditional institutions of the people, then its basis clearly ought in this case to be the pagan and not the Fulani institutions. The independent pagan peoples, of which some, like the Tiv, form a large population, presented the difficulty that authority seemed in many cases to reside in leaders of family or kinship

¹ See Chap. X, pp. 577-9.

groups, or even in associations of the nature of secret societies, rather than in any recognizable system of chieftainship. It might, indeed, have seemed that there was no alternative but to apply to them the direct system of administration which has elsewhere been deemed the only solution of a similar situation. With the increase both of staff and of knowledge, however, in recent years great efforts have been made to utilize the pagan institutions as a basis for native administration in the northern areas.

In the Southern Provinces the government had to deal with two diverse sets of political conditions. The Yoruba area contained strong chiefships to which the system of native administration introduced into the emirates was readily applicable. In the south-east, however, the social institutions were of even greater complexity than those of the independent pagans in the north. Here the organization of society has not inaptly been described as atomic;¹ though the characteristic and pivotal group is the collection of a number of extended families, there is a wide diffusion of authority among elders, politico-religious associations, and guilds of title-holders.² An organization of this type, marked by an equalitarian attitude towards the complex of ill-defined authorities through which the community regulated its life, might well have involved a condition of social anarchy; actually it was able to cater adequately for such needs as society presented; but it afforded a baffling problem to those who looked for authorities on whom to base a system of native administration. Moreover, even if suitable authorities could be discovered to exercise the powers which the Native Authority Ordinance provided, the fact that no direct tax had as yet been imposed in the South-Eastern Provinces seemed to render it impossible to institute native treasuries.

In their endeavour to find in the independent pagan areas of the Northern Provinces and in the South-Eastern Provinces suitable authorities for use as agents of the administration, local officers had in the first instance given recognition to a variety of 'chiefs' or headmen who appeared to possess local influence, or to persons selected as 'warrant chiefs', who were authorized to exercise jurisdiction under the Native Courts Ordinance. The potential efficacy of a 'selected' or 'created' native authority,

¹ M. Perham, *op. cit.*, 1927, p. 223.

² *Ibid.*, p. 227.

drawing its support from powers conferred by the administration, as compared with an authority enjoying an inherent influence based on tradition, is one of the most debated issues of native administration;¹ in Nigeria the growing sentiment in favour of the use of traditional authorities is based on the success attained in their usage in Northern Nigeria and the Yoruba Provinces and on experience of the deficiencies of the system of 'warrant chiefs' in the South-Eastern Provinces. This area, strongly democratic in the special African sense, proved to be a peculiarly unfavourable field for the use of placemen of this type, and their failure, which was admitted in the administrative inquiries made in 1922 and 1923,² was emphasized by the incidents which took place in the course of the riots attending the introduction of taxation in 1929.³ The system clearly needed revision; and, commencing in 1926, a comprehensive series of investigations was undertaken partly by the government anthropologist, Dr. Meek, and partly by administrative officers,⁴ with a view to determining the nature of the social groupings and the traditional distribution of judicial and executive functions.

As a result, an effort has been made to constitute the native authorities on a basis which will secure for them such measure of support as societies so lacking in the elements of political organization can be expected to yield. In summarizing the form which reorganization has taken it must be realized that it is not yet complete, and that in some cases it has only a tentative character. In general there has been a drastic diminution in the area and population of the units of native administration. In some cases it has been possible to substitute for the previous chief or headman, who exercised executive authority by virtue of the judicial powers arbitrarily conferred on him, one whom further inquiry has shown to have a traditional claim to leadership. The general course, however, has been to group together villages having a common ancestry into clan or group areas served by clan or group councils, to which every village within the organization

¹ See below, p. 529.

² *Report on the Eastern Provinces by the Secretary for Native Affairs, 1922; Report on a Tour in the Eastern Provinces by the Assistant Secretary for Native Affairs, 1923.*

³ See *Sessional papers of the Nigerian Legislative Council*, Nos. 12 and 28 of 1930; and Chap X, p. 581.

⁴ See Chap. II, p. 47.

sends representatives, the manner of representation being left to the villages themselves to decide. The clan or group council is gazetted as the native authority under the Native Authority Ordinance, and in some cases the component group or village councils have been gazetted as native authorities subordinate to the clan or group authority. As regards the judicial system, procedure has followed the same lines; where the traditional chief has been recognized as exercising judicial as well as executive authority he has also been given a judicial position as president of the native court. In areas where no single judicial authority existed, clan or group courts have been established comprising either family heads or such representatives as village custom provides, the personnel of the courts being usually, but not always, identical with that of the native authorities. In several districts the clan or group courts have been constituted Courts of Appeal for the group or village courts below, with which they exercise concurrent original jurisdiction; elsewhere they have been left with independent powers. A few courts have presidents recognized in their commission; in others presidents are selected for each sitting; there are some again which appear able to dispense with a president. Many of the new native authorities have been given their own separate treasuries and administer their own finances: others share a common treasury with neighbouring village groups, separate subsidiary estimates being compiled for each unit and the custody of the funds remaining, as a rule, with the District Officer.

The reorganization will be subject to further changes before it takes a final character. The mere number of new authorities created in some areas is itself a formidable difficulty; in one province alone there has been an increase from 52 to 250; and there is an added difficulty in the fact that many of the clan or village groups have no executive head. The initial result of the reorganization has been to stimulate an almost competitive assertion of group consciousness; it is clear that, if the large number of minor authorities now recognized are to develop into effective organs of local government, consolidation or federation must take place, and there are already some indications that, when once the spirit of group consciousness has been satisfied, the process of consolidation need not present grave difficulties.

Meanwhile it can be claimed for the reorganization that it has aroused a growing interest in the development of local improvements, such as education and medical facilities. The most striking evidence of its success is to be found in the growing ease with which tax-collection is being effected in the areas which were responsible for the disturbances of 1929, an improvement which is no doubt largely due to the visible proof offered by the native treasury system that a substantial part of the tax is devoted to local needs.

There are now in the Northern Provinces 86 chiefs and 130 councils, including chiefs in council, as native authorities, with 41 and 451 native authorities subordinate to them respectively. In Southern Nigeria at the end of 1937 there were recognized as native authorities 29 chiefs, 139 chiefs in council, 360 clan and group councils, some with numerous subordinate native authorities, 150 village councils, and 29 native courts. Native courts are gazetted as native authorities as a temporary expedient pending the reorganization of the area on a clan or group basis.¹ In 1936 there were in the Northern Province 63 native treasuries. In 1928 37 of these were given 70 per cent. of the proceeds of native taxation; in the depression year 1933-4, however, the government reduced the percentage, and 1 received 65 per cent., 26 received 60 per cent., and all the remaining treasuries received 50 per cent. of the tax.

The extent of the activity in which this system allows a native authority to engage may be illustrated from the example of the Kano Emirate, the most important of the northern native administrations, which covers an area of 13,000 square miles, and contains a population of about 2,000,000 people. It had in 1936-7 an estimated revenue of £206,720, of which £173,600 came from its share of the tax collected in its area, and the remainder from various fees and dues. The estimated ordinary expenditure for the year was £199,367; administrative and judicial establishments accounted for £70,675, included in this sum being £6,000 as the salary of the emir with £2,500 as his establishment allowance; police and prisons £19,089; works and works staff £61,416; education £6,785; survey £6,468; medical and sanitary £15,922; agriculture and forestry £9,113; and capital works £6,020.

¹ *Gazette Extraordinary* no. 85, Dec. 29, 1937.

In addition, 'special expenditure' from accumulated balances amounted to £57,537. The treasury on March 21, 1935, had an invested reserve of £142,914. The native administration has installed a water-supply and electric-light installation in Kano city, has a large and well-equipped hospital, a middle and ten elementary schools, a survey establishment,¹ and is responsible for the construction and maintenance of all communications in its area. It maintains a large central prison and its own police force. The budget is prepared by the treasury officials, but requires the approval of government; subject to the Resident's concurrence, re-allotment may be made between sanctioned budget heads up to a limit prescribed by the financial rules made by government. The native administration had in its employ eight Europeans on its Public Works establishment, also one medical officer, two sanitary superintendents, and one stockman; the remainder of the establishment, including that employed in the treasury and the survey department, is African. The electrical and water undertakings, which used to be run by the native administration with its staff of European engineers, have since come under the government Public Works Department, the native administration being represented on the board of management. The emir presides over an executive council of four of his chief officials, and the council has a weekly meeting with the Resident of Kano—a procedure which, it may be observed, is followed also in the case of other large native administrations.

No other native authority in the Northern Provinces approaches the exceptional position of Kano. The nearest are Sokoto with an estimated revenue in 1936-7 of £95,350, Katsina with £75,662, and Bornu with £58,601; at the other end of the list are four administrations with an income of less than £1,000, the lowest being Ilo with £635. Of the total expenditure of native administrations estimated in 1936-7 at £973,468, the larger proportion, amounting to 57 per cent., is accounted for under the head 'administration', which includes the salaries of chiefs and the executive and judicial establishment, 23.2 per cent. by public works, 6 per cent. by health, 5.5 per cent. by education, and 6.3 per cent. by agricultural and other services.

¹ See Chap. XII, p. 853.

In the Southern Provinces the percentages of tax allowed to native administrations have recently been reviewed, and where it was shown that individual native authorities were willing and able to undertake public services for which their existing revenues were inadequate, they have been granted an increased share of tax. There were, at the beginning of 1938, 114 native treasuries, of which 10 receive 70 per cent., 47 receive 60 per cent., 12 receive 55 per cent., and the remainder 50 per cent., of the direct taxes. The most wealthy of the treasuries are Ibadan and Egba (Abeokuta) with annual revenues exceeding £83,000 and £68,000 respectively, the next largest being Ijebu, Oyo, and Benin with annual revenues exceeding £50,000, £27,000, and £25,000 respectively. As compared with the Northern Provinces there is a far larger number of small treasuries, 23 having an estimated income (1938-9) of less than £1,000 and 3 having only £156. There is, as might be expected, a corresponding difference in the scale of activities undertaken: only 7 of the native administrations have their own prisons; only the larger administrations can undertake medical or educational work on any serious scale; the estimates for 1938-9 show that, of the total native administration expenditure amounting to £677,034, 60 per cent. is spent on administration, 28 per cent. on public works, and 11·8 per cent. on education and health services.

The native treasury is regarded in Nigeria as an essential feature of the system of native administration.¹ The treasury not only keeps alive the tradition under which the native authority held the proceeds of tribute or services in trust on behalf of the community; the power of disbursement provides a training in responsibility, and establishes a close contact between the native authority and those on whose behalf expenditure is incurred. Historical and economic features have permitted some of the native administrations in Nigeria to exhibit an activity in local government far more spectacular than in other territories under indirect rule. The extent of the allocation of general revenues made in their favour has indeed created certain problems as to the place occupied by native administrations in the general development of the territory, which do not occur in a similar form elsewhere. Where,

¹ *Report by the Rt. Hon. W. G. A. Ormsby-Gore on his Visit to West Africa*, Cmd. 2744, 1929, p. 116.

as in India, institutions for local self-government have been created by devolution of functions from a central authority, it has been possible to maintain some uniformity of treatment in different areas, by adjusting the extent of the responsibilities of the local body in proportion to the sources of revenue devolved; the system followed in Nigeria, by which a large part of the general tax automatically passes to the native authority, produces a marked inequality in the opportunities for development enjoyed by different areas. The services which can be provided, for instance, by Kano differ widely from those available to a poorer neighbour, and the disparity can only be adjusted by the central government's undertaking, at the expense of general revenues, the activities which the poorer administrations cannot afford. A further difficulty arises as to the relative spheres of activity of the central departments and of the administrative officers in charge of the native administrations; a general programme for dealing with epidemic disease may become dependent on the concurrence of a large number of authorities regulating native administration finance. An assistant director of public works, whose duties now include that of superintendent of native administration works, has been appointed for the Northern Provinces, and instructions have been issued to regulate the relations of departmental and administrative officers;¹ but the fundamental difficulty, arising from the ambiguous position as between the central government and the native administrations, which is increased by the present system of allocation of revenues to the latter, still remains for solution, and is receiving government's close attention.

In addition to the general obligation to assist in maintaining order and preventing crime, for which purpose a native authority has powers of arrest, an authority may issue executive orders² on a variety of matters including the manufacture and use of liquor, the carrying of weapons, the safeguarding of water sources, contagious disease, the migration of natives from and to its area, measures for dealing with tsetse fly, the compulsory cultivation of subsistence crops, and matters which by any native law or custom the authority has power to regulate; the breach of such orders can be punished in a native tribunal by fine or imprisonment up to six months. Native authority orders are frequent and

¹ *Gazette* no. 62, Dec. 22, 1932.

² Orders, not Rules, is the Nigerian term.

relate to such matters as sanitation and markets or township regulations where Township Ordinances do not apply. In the Northern Provinces and in Oyo cattle-control orders emanate from the native authority; in Ibadan the authority makes orders regarding the transfer of land.¹ The orders issued may be revoked by the Resident, who may also direct the authority to issue orders which he considers to be necessary, and, failing compliance, issue them himself. The government has accordingly the power to bring its own ordinances, such as those relating to health, sanitation, animal pests, and the like, within the scope of the functions of the native administration, and in consequence within the jurisdiction of the native tribunals. In Benin the native authority administers the whole of the Forest Ordinance, but it is more usual for the authorities to make simple orders which make the application of ordinances such as the Public Health Ordinance unnecessary.

Native authorities may also, subject to the approval of the Governor, make rules providing for the welfare of persons within their jurisdiction, including rules regarding the public services which they provide and the imposition of rates. One object of this power of subsidiary legislation was to enable native customary laws to be placed on record, and to allow for their development and expansion to meet changing needs.² The native authorities' rules have, however, been used more to give directions as to local observance than to modify native custom, as the courts themselves modify custom when it becomes necessary to do so. Rules are not always gazetted.

The Native Authority Ordinance³ leaves a wide latitude as to the use which the native administrations, differing widely in their constitution and the extent of their resources, may make of their powers. Methods have been prescribed for the institution of treasuries, the preparation and supervision of budgets, the auditing of accounts, and the like. The measure of control exercised by officers of the administration varies; it has been shown that, in the case of the major native administrations, the Resident meets the chief and his council

¹ See Chap. XII, p. 854.

² Sir D. Cameron, *op. cit.*, 1934, para. 41. See Chap. VII, p. 308.

³ No. 43 of 1933.

weekly, and that the annual budget has to be submitted for the approval of government; in the administrations at the lower end of the scale the control becomes closer, and in the smallest every item of expenditure requires an officer's counter-signature.

The native court is so essential to native administration as practised in Nigeria, that it will be convenient to add here some details of these tribunals. They are true native courts in the sense that, save in the exceptional case mentioned below, administrative officers do not take part in their proceedings. Under the Native Courts Ordinance¹ courts recognized by government may consist of one or more chiefs or other persons, or a combination of these, according to the provision made in the warrant. They are classified in four grades, described as A, B, C, and D, and certain courts may be appointed native courts of appeal. No native court has jurisdiction in cases of treason, sedition, corruption by government servants, offences against public revenues, or trial by ordeal; with these exceptions the A courts or higher grade have complete criminal jurisdiction over natives within their areas. In 1933 seventeen such courts were scheduled. The limited A court, of which there were twenty, has jurisdiction over all cases save those of homicide; the B, C, and D courts have powers which are proportionately limited, the D court, for instance, having criminal powers only in cases which can be adequately punished by imprisonment up to three months, or, in the case of theft of farm produce, up to six months. The courts administer native law and custom, orders or rules passed by native authorities, and the provision of any government ordinance which they may be specially authorized to enforce, as for instance the Native Revenue Ordinance. Sentences of death are subject to confirmation by the Governor; corporal punishment can be inflicted up to the limit prescribed by law, but its execution must await confirmation either by the emir, if imposed by an A grade court, or by the district officer, if imposed by any other court. It is specially provided that the district officer may sit as adviser in any court and as president in courts prescribed by the governor when suits regarding land are being heard. The Resident and district officer have access to the proceedings of all courts, and may review any of their decisions, or transfer the case

¹ No. 44 of 1933.

to their own or any other court. The provisions regarding appeal are dealt with elsewhere;¹ but it may be noted that the aim is to constitute a self-contained system of native courts by providing, whenever possible, Native Courts of Appeal which hear appeals from a court of first instance. When the latter is an A court, the appeal generally lies direct to the High Court, and where no Native Court of Appeal exists, then to the magistrate's or district officer's court. But there is no appeal beyond the native court system, unless the warrant expressly so provides, in matters relating to marriage, family status, inheritance, or guardianship of children; these matters are considered to be peculiarly within the knowledge of native courts, and cover the majority of cases in most areas. In such matters redress can be obtained by way of review by administrative officers.

How far the system can be said to have changed in character in the course of its evolution is perhaps a question mainly of historical interest. Sir Donald Cameron's Memorandum of 1934 reasserts in substance the principles formulated in the *Political Memoranda* in which Lord Lugard embodied his views of native administration. If the Memorandum of 1934 differs from the earlier *Memoranda* it is mainly in the emphasis it lays on certain principles selected as underlying the application of the system. It² insists that, if the native authorities are to become not only a part of the machinery of government but a living part of it, the political energies and ability of the people must be directed to the preservation and development of their own institutions; the native authority selected for recognition by government must therefore be that which according to tribal tradition and usage has in the past regulated the affairs of each unit of native society; it is equally important that it should be that which the people of to-day are willing to recognize and obey. But the objective is not merely the utilization of native authorities as instruments of local government; native administration is conceived as a means of trying 'to graft our higher civilization upon the soundly rooted native stock . . . moulding it and establishing it into lines consonant with modern ideas and higher standards'. This view of the objective of native administration, or of the

¹ See Chap. VII, p. 285.

² Paras. 9 and 12.

methods implicit in its formulation, may not differ in any material sense from that of the earlier *Political Memoranda*; but it expresses a conception of the doctrine underlying the system of indirect rule which brings it into pronounced contrast with systems that seek to effect the improvement of native conditions by the direct activity of government establishments¹ or the adaptation of institutions framed on a European model.

IX. BRITISH CAMEROONS

The system of native administration in the Cameroons under British mandate follows that of the neighbouring districts of Nigeria; in effect, the territory falls into two sections, corresponding to the Northern and the South-Eastern provinces of Nigeria. The social institutions of the people have been carefully surveyed, with a view to discovering the traditional seat of authority.² The organization of native administration in the light of this inquiry has resulted in the recognition under the Nigerian Ordinances of 1933, which have been extended to the Cameroons, of native authorities of various types. In the coast area of Victoria District the district head is an educated man, and head of one clan, whose authority extends over a heterogeneous population and does not rest upon native tradition; the Bakweri and Balong native authorities, also in the Victoria Division, are, on the other hand, based upon indigenous institutions, and consist of village heads with councils of elders, which send representatives to a clan council under the chairmanship of the district head. In parts of the Kumba Division the recognized native authorities are the representative of small kindred groups which do not acknowledge a superior authority; in the Bamenda and Mamfe Divisions there are sometimes chiefs with councils, and in other areas the authority is the native court, consisting of representatives of the villages. In part of the Adamawa Districts, which the Lamido, the Fulani ruler, formerly controlled through hereditary fief-holders, it has been necessary to retain the system of district heads, though they are not hereditary leaders, since the pagan tribes are not yet able

¹ For problems arising out of the relations between government departments and native administrations see Sir H. Clifford's Minute, *Gazette* no. 13, Mar. 2, 1926; Sir D. Cameron, *op. cit.*, 1934, paras. 17, 26-9.

² See Chap. II, p. 47, and above, p. 424.

to provide leaders of their own. In the Kentu areas, which are still in process of organization, chiefs and elders function as native authorities and courts. In Dikwa the standing of the Shehu closely resembles that of the emirs of Northern Nigeria;¹ the Dikwa and Bornu ruling houses have indeed a common history. The Shehu is the native authority and controls the areas under his jurisdiction through district heads whom he appoints. He maintains his own police and his own prison.

The larger native authorities have their own treasuries; the smaller have in some cases been associated with central treasuries. The Adamawa Districts in the mandated territory are treated as part of the Adamawa Emirate, which has its treasury at Yola in Nigeria; the Kentu area administrations are affiliated with those of Wakuri, Takum, and Donga in Nigeria; but sub-accounts are kept in order that the local areas should have the benefit of revenues collected in them, an arrangement which is of some interest in view of the prescriptions of the mandate. The proportion of the general tax allocated to the native treasuries is 70 per cent. in Mamfe, Bamenda, and Balony, 65 per cent. in Dikwa, 60 per cent. in Kentu, Adamawa, Victoria, Bakweri, and Kumber, and 50 per cent. elsewhere. For 1935-6 the total revenue of the ten treasuries was £43,494, the smallest having a revenue of only £245. The chief items of expenditure are on establishment and works of various kinds; the contribution to medical and educational activity is relatively small. The Shehu of Dikwa receives a salary of 14 per cent. of the tax, a relatively large amount which reflects the exceptional position occupied by him, and it is not intended that his successor should receive a similar treatment. In most of the native administrations the salaries paid to chiefs are small.

X. TANGANYIKA TERRITORY

Tanganyika affords a close analogy to Nigeria. It may be said to owe the form of its native administration to Sir Donald Cameron, who before he became Governor of the territory in 1925 had previously spent sixteen years in Nigeria, and the latter country in its turn received the benefit of Sir Donald's experience of the

¹ See above, pp. 417-20.

development of the system in Tanganyika when he returned to Lagos as Governor in 1931. In the course of the rule of their East African Protectorate the Germans had found in Ruanda-Urundi and Bukoba the type of organization which they felt able to recognize; they appointed Residents to these three areas, who carried on the administration through the local 'sultans'. The coastal regions and the south, where not only was the tribal organization weaker, but military and other considerations led them to adopt a policy of curtailing the powers of local chiefs, were divided into seventeen civil districts under district officers who carried on their administration through subordinate officials, the akidas and jumbes, a system developed from that introduced by the Sultan of Zanzibar. The akidas were for the most part of Arab or Swahili extraction, and received a special training for their work; the jumbes, or village headmen, were appointed by the administration, and given judicial powers subordinate to those of the akidas. An objective study of the German system of administration has yet to be written, and much of the available evidence of its character is coloured by the prejudices of the war period. As regards the merits of the akidas, there is some conflict of opinion among those who had the opportunity of observing the German administration; to some they gave the impression of an efficient subordinate service, though hampered in their judicial functions by the fact that they were acquainted only with Moslem law; others have described them as overbearing and corrupt. Had the system been consistently pursued for a sufficient period and in conditions (such as those now generally prevailing) in which administration takes a wider scope than the rudimentary purposes which it then served, it might have furnished an interesting experiment in the use of a trained African agency in regulating native affairs. It is of interest to note, however, that Dr. Solf, as Minister of the Colonies, determined about 1913 to introduce into the native administration of the German Cameroons some of the features of indirect rule as practised in Northern Nigeria.

The British authorities adopted at the outset the system which they found in force, but as early as 1922 the Governor, Sir Horace Byatt, announced his intention to adopt a form of indirect administration, and in 1923 a Native Authority Ordinance was issued

to confer on administrative officers, native chiefs, and headmen the authority to issue rules for the maintenance of order and the prevention of crime. In practice no systematic use was made of native authorities until the enactment by Sir Donald Cameron of the Native Authority Ordinance of 1926, the principles of which had been explained by him in a Circular of July 1925.¹ In most essential points the circular took the same ground as the subsequent Nigerian Memorandum on the *Principles of Native Administration* to which reference has previously been made;² but in issuing it in a revised form in 1930 the Governor took the opportunity further to emphasize the value of a system of indirect administration as a method by which the government could give effect to its obligations under the mandate. He pointed out that Article 22 of the Covenant implied that the guardianship or tutelage created should continue only until the peoples concerned were 'able to stand by themselves', and whatever the precise political objective which this involved, it could not mean merely the attainment of responsible government by the European section of the population; it clearly required that the mandatory should make such dispositions that, when the time came, a full place in the political structure should be found for the native population. The method of indirect administration appeared, in his opinion, to be the best way to meet this requirement; it would serve to keep native society together and to give it some training, however simple, in public affairs.

In introducing this change the government was in some measure influenced also by considerations connected with the raising of the native tax, which was found necessary in 1922.³ Some difficulty was experienced through the fact that tribesmen, in addition to payment of the government tax, also rendered to chiefs an annual tribute either in kind or service. This tribute, which by custom was held in trust for communal purposes, had tended with the growth of economic conditions to become a source of personal profit, and irregular exactions were frequently made. The issue of the Ordinance of 1926 permitted of the institution of native administration treasuries, and the opportunity was taken to assess

¹ No. 50, issued in revised form as *Native Administration Memoranda*, no. 1, 1930.

² See above, p. 432.

³ See Chap. X, p. 567.

the value of the privileges of the chiefs, the amount at which they were assessed being added to the hut and poll-tax and paid into the treasuries, in order to form a civil list from which chiefs could be paid salaries proportionate to their status and the wealth of the unit as expressed by the amount of tax which it paid. Tribute and services to chiefs were as a result abolished. The assessment of the compensation due to chiefs led to considerable diversity in the rate of remuneration paid to them; the amount was largest where the tribal system survived in its strongest form, it being estimated that one chief enjoyed the disposal of tribute worth not less than £10,000 annually; in other cases the amount was negligible.¹ There are in Tanganyika no native administrations of the size and importance of those to which reference has been made in treating of Nigeria; the highest salaries paid to Tanganyika chiefs are perhaps to be found in Bukoba, where one chief receives £2,187 with a commutation allowance of £673; another receives £1,600 plus a commutation allowance of £440, another £1,220. These are, however, exceptional cases, and adjustments are being made as offices fall vacant; the general range of salaries is on a much more moderate scale; there are some chiefs who receive only £30 a year.

The organization of the native authority system constituted by the ordinance is elastic, and adaptable to a variety of circumstances. There are four classes of such authorities. The first is the Chief Native Authority, the so-called paramount chief; he usually has subordinate chiefs under him, who are gazetted as subordinate to the Chief Native Authority; but the native treasury is that of the major unit. Secondly, certain federations of chiefs are recognized as native authorities; each chief is the authority in his own unit, and retains independent executive powers; but the members of the federation combine for certain purposes, principally to constitute a joint treasury, and for the passing of 'rules' applicable throughout the federation. In most of the native administrations of this class the president of the federal council is chosen in rotation, but in some a permanent president has been appointed by the chiefs themselves. The third class of native administration is the tribal council, consisting of petty chiefs or

¹ *Proceedings of the Legislative Council, First Session, 1926-7*, pp. 33-5.

headmen, belonging to the same tribe; they sit as chairman of the council in rotation, and have a common treasury. Fourthly, there is the small chief or village headman of a more or less isolated portion of a tribe in areas which recognize no wider political authority; each, if recognized, is appointed a native authority with limited powers and a small treasury. These latter authorities correspond to the clan or village council in Nigeria.¹ It will be understood that, as in Nigeria, the chief or headman obtains that position by the customary usage of his community, whether it be hereditary or by selection, and the administration intervenes mainly in order to settle disputes as to succession. He acquires the constitutional position of native authority only when he is recognized by the administration as such; and it is implied that, in acting in this capacity, he maintains the customs of his community in respect of consultation with his council. The membership of the council is not prescribed by the administration; it is regulated by local custom. In the first year after the issue of the ordinance five native administrations were gazetted; there followed in the subsequent years a process of investigation and inquiry, with the object of ascertaining the traditional sources of authority and drawing the boundaries of their jurisdiction. At first a tendency was shown to form centralized political units through the creation of paramount chiefs, but appointments of this nature, where they lacked the support of traditional usage, were not successful, and later policy has sought to find a more suitable unit for executive and judicial purposes in a gradual process of amalgamation. That process still continues.

Difficulties have been encountered in the coastal areas, in some districts owing to the existence of aggregations of people of different tribes and customs in one locality, in others to the general breakdown of tribal organization. Dar-es-Salaam district was directly administered up to 1930; in that year an investigation into the social constitution of the inhabitants resulted in the recognition of the village community as the administrative unit. Headmen (Ndewas), chosen by the villagers themselves, were appointed as executive authorities. The system appears to have met with little success, and in some cases the government has had to take over the

¹ See above, pp. 424-5.

work of collecting tax. In other coastal areas it has been remarked that native authorities are ineffective without the continuous support of the district administration; and that they have not the authority of the *akidas* of the past. In parts of the Lindi and Mikindani Districts it has been necessary to create a number of posts of 'superior native authority' with executive powers extending over areas larger than those covered by the traditional authorities previously recognized; these are members of the tribes concerned and chosen by them. It may be premature to conclude that a system of indirect administration is unsuited to such communities; but it would also be inadvisable to allow convictions based on the success of this system in other conditions to rule out the possibility that an experiment in a more direct method of administration might justify itself in these areas. It is noteworthy that in 1934 it was found necessary to place an Arab *liwali*, who is *ex officio* a native subordinate court magistrate, in charge of the mixed native community at Ujiji on the shores of Lake Tanganyika, and he was in 1935 appointed President of the Luichi federation, the native authority which has jurisdiction over this area. The Masai have presented a difficulty of a different character; their own organization has not broken down, but it is one which recognizes no individuals as entitled to exercise the powers usually conferred on a native authority. Discussion with the tribe led to an agreement that the headmen were not expected to act as individuals but as a council; the Laibon, a religious head, being expected to delegate any duties not of a hereditary character to chosen members of his council. A system of administrative arbitration and debate by local councils was accordingly approved; but though the machinery of indirect rule has thus been provided, it cannot as yet be said to function.

Amalgamation and federation have led to a reduction in the number of native treasuries, which at the end of 1937 numbered 77 in all. Their resources consist of the 'rebate' on the house and poll-tax collected in their area, native court fees, and local dues, such as ferry and market fees. The 'rebate' was at the outset fixed at 10 per cent., but has been gradually raised, and now ranges from 20 to 33 per cent. Of the total house and poll-tax of £632,330 collected in 1935, the native authorities received £145,324 as

'rebate', and with the addition of local receipts their total revenue for 1935 amounted to £186,723; the accumulated balance from previous years carried forward to 1936 was £143,639. It is inevitable that in the circumstances the 'tribal administration' charges, including salaries of chiefs and other establishment charges, should constitute the largest item in their budget, amounting in 1935 to 68.1 per cent. of their total expenditure. In some cases, as for instance Bukoba, the expenditure on chiefs' salaries is clearly disproportionate; in 1934, out of a total revenue of £23,425, the salaries of the Bukoba chiefs, their deputies, and the sub-chiefs absorbed £11,700, and those of headmen £1,399, or 55.9 per cent. of the annual revenue. As regards other classes of expenditure incurred by the native authorities in 1935, 9.6 per cent. was charged to health, 4.2 per cent. to education, 6.4 per cent. to agriculture and veterinary services, and 5.3 per cent. to roads and bridges.

The ordinance¹ which lays down the jurisdiction and duties of the native authorities closely resembles that of Nigeria; the special circumstances of Tanganyika account for the fact that their powers are here specifically held to include the engagement of labour for public works, the provision of food for travellers, and the execution of measures to prevent famine. The absence of large political organizations such as exist in some areas of Nigeria, and the relative lack of experience among the chiefs, have necessitated a stricter measure of control over the working of native administrations; with one or two exceptions, there are few administrations which are yet capable of maintaining their own treasury accounts in as complete a form as some of the Nigerian treasuries, and in some cases these are kept at the district headquarters.² On the other hand, there would appear to be a more extended use made of the native authorities as agencies of the administration in the discharge of a number of its social activities. Of this there are many evidences; typical cases will be found in the extensive use of native authorities in the campaign against tsetse-fly and the resettlement of cleared areas, and in the passing of native authority rules to establish and control markets for

¹ *Laws*, cap. 47.

² For the organization of tax-collection see Chap. X, pp. 567-70.

native produce,¹ to combat soil erosion by contour ridging,² to control coffee cultivation,³ to prohibit the sale of foodstuffs for export in periods of local scarcity, to promote afforestation, to close areas to stock grazing, and to regulate attendance at school.⁴ In all such cases, breach of the order or rule is triable by the native tribunal. In some instances such rules or orders may be due to the initiative of the native authorities; for the most part, however, they may be said to be the result of advice given by administrative officers and, as will have been seen, they extend beyond the range of matters which would normally have been regulated by native authorities under their own customs; the native authority has become a recognized agency in assisting the operations of the central departments. It would also appear that native authorities in Tanganyika have made a wide use of section 15 of the ordinance⁵ which allows them to use their rule-making power for defining or modifying local customary law. Thus, native authorities have in different areas passed rules for the registration of marriages, for limiting dowry, for regulating testament by will and succession to holdings, for abolishing claims for the return of cattle in dowry suits, for creating rights of ownership in coffee-trees, and for modifying the tribal custom governing damages in adultery suits. Reference is made elsewhere to the rules made by the native authority in Bukoba in defining the special nyarubanja tenure and registering transfers.⁶

The native court is now organized on the same principle as in Nigeria.⁷ The system established by the Courts Ordinance of 1920 made the native courts subordinate to the High Court, though they remained under the supervision of political officers. In theory this had the result of making the native court part of the system of European justice; that it did not do so in practice was due to the fact that the limits of the two spheres of supervision were ill defined,⁸ and that effective control of the native court actually

¹ Markets Ordinance (cap. 109, *Laws of Tanganyika*); Mwanza District By-laws, 1933; Shinyanga Market Rules, 1933.

² Government Notice 40 of 1935.

³ *Rules for the Control of Coffee Cultivation in Western Usambara*, 1932 (Orders under section 15 of the Native Authority Ordinance 18 of 1926).

⁴ Government Notice 86 of 1931.

⁵ Native Authority Ordinance 18 of 1926.

⁶ See Chap. XII, p. 848.

⁷ *Native Administration Memoranda*, No. 2, *Native Courts*, 2nd edition, 1930.

⁸ *Proceedings of the Legislative Council*, April 3, 1929, p. 26.

stopped with the administrative officer. The enactment of the Native Authority Ordinance of 1926 necessitated a reconsideration of the place assigned to the native court, not merely because the ordinance was the outcome of a policy which attached a new importance to the position of traditional institutions, but because the native court now became the tribunal for trying cases arising out of the orders and rules issued by the native authorities. The Native Courts Ordinance of 1929 had for its object the institution of a self-contained system of native courts under administrative supervision; it removed the courts from the control of the Supreme Court, and made the executive authorities the sole avenue of appeal. There is nowhere any separation of judicial and executive personnel, as in the alkali courts of Nigeria. The court is identical with the executive authority, and is constituted 'in accordance with native law and custom'; thus, though the warrant is in the name of the chief, the membership of the court is not prescribed by the administration, and custom regulates the manner in which a council or elders are associated in the trial of cases. There are two grades of court, but the jurisdiction of each particular court is separately defined in its warrant; in typical instances, the first grade has powers in civil cases where not more than 600s. is involved, and criminal powers over offences not punishable with more than six months' imprisonment or a fine of 200s. or 8 strokes; these courts also in many cases hear appeals from courts of the second class. Certain traditional chiefs' courts belonging to the first grade have, owing to pressure of business, delegated minor jurisdiction to new courts of the second grade under sub-chiefs. These new courts, notwithstanding the absence of traditional authority, appear to command popular respect and to work efficiently. The second-class courts have civil jurisdiction up to a subject-matter of 200s., and in criminal cases are limited to a punishment of one month, a fine of 50s., and 6 strokes. The range of powers entrusted to the native courts is therefore substantially lower than in Nigeria. There are the same provisions for inspection of proceedings and revision of decisions by administrative officers; sentences of corporal punishment cannot be carried out until confirmed by them;¹ and it may be

¹ The Native Courts (Corporal Punishment) Regulations, 1929.

further noted that there are in Tanganyika no native administration prisons. All fees and fines are paid into the native treasury account.

The organization of native administration on both its executive and its judicial side has deliberately been kept in a flexible form, and its structure has not yet taken a final shape. There has been a progressive integration of the traditional native institutions into the general administrative system, as is shown by the growing use of rules and orders issued by the native authorities to secure the purposes of government. At the present stage of development there is not unnaturally a marked inequality in the efficiency of different native authorities, and the character of the native administrations as a whole may be said to depend largely on the extent of the supervision exercised. There are many evidences of the growth of a sense of initiative and responsibility, but on the experience so far gained it would be premature to attempt an estimate of the capacity of the present institutions to develop into autonomous organs of local government. Nor is it as yet easy to estimate the extent to which the system of native administration, still in an experimental stage, has provided a training that will fit natives to take their place in the political life of their country. It was anticipated in the Memorandum of 1930 that there might eventually be a central non-native and a central native council, delegates from each sitting to discharge most of the business now conducted in the legislative council. So far, no steps have been taken to introduce any form of political organization which would prepare for a development of this nature. There have been conferences of native authorities for the discussion of common problems, such as those of the fifty-two chiefs of the four Sukuma districts of the Lake Province, and such meetings may contain the embryo of further political organizations; they are, however, at present only assemblies convened for informal consultation and discussion.

XI. UGANDA

In Uganda the development of native authorities as agencies of local government began earlier and, in some respects, is more complete than in Nigeria or Tanganyika; this peculiar position in

native administration was due largely to the circumstances leading up to the Agreement of 1900.¹ The Buganda kingdom was a developed political organization. Under the Kabaka a native parliament, the Lukiko, was responsible for legislation, and was at the same time the final judicial authority. The Kabaka exercised authority through great chiefs who had jurisdiction over divisions or 'counties', with district chiefs subordinate to them, the whole forming an official hierarchy, superimposed on the original clan organization, and directly responsible to the central executive. The head of the administration and judiciary was the king's chief minister; the king himself, while regarded as the source of authority, took little part in actual administration. The Agreement maintained the essential features of this organization, and permitted of a substantial measure of local autonomy. It recognized the Kabaka as the 'native ruler of the Province of Uganda under Her Majesty's protection and overrule'; it was, however, lacking in precision in its reference to the measure of legislative and judicial authority which his government would enjoy. Article 5 provided that the laws of the protectorate were to be equally applicable to the kingdom of Buganda, 'except in so far as they may in any particular conflict with the terms of this Agreement'. The condition of repugnancy was not easily applied in practice, and at one stage the protectorate courts held that the Agreement was to be interpreted as leaving all the powers of the native government unimpaired, save where they were expressly taken away or limited by the Agreement; it was doubted, for instance, whether the Uganda Order in Council of 1902 establishing a High Court with powers of appeal could validly terminate a right conferred by the Agreement to appeal from the native courts to an administrative officer.² A solution was found in the conclusion of a series of later agreements which now regulate the relations of the Buganda kingdom with the protectorate government. The Native Laws Agreement of 1910 provided that the Kabaka and the Lukiko may 'make laws governing the Baganda in Buganda', with the consent of the Governor,³ and there are agreements regulating

¹ See Chap. XII, pp. 759 ff. and 851.

² *Uganda Law Reports*, vol. i, p. 22 (1907), p. 41 (1908).

³ Buganda Agreement (Native Laws), 1910.

judicial relations¹ and other matters. These agreements have removed many of the difficulties which might have followed from the existence of dual sources of authority. The Lukiko has, subject to the veto of the Governor, an effective power of internal legislation, and has passed laws regulating the eviction of peasants by mailo² owners, the commutation of the tithe on economic crops,³ and the commutation of *luwalo*.⁴ Under an agreement with the government it has imposed a tax on land and adopted laws defining native custom in regard to succession to mailo land.⁵ At its annual plenary meeting it passes resolutions on matters affecting the relations with the protectorate authority; these resolutions, however, must be submitted to the Governor for approval. The principal ministers of state, namely the Prime Minister, the Chief Justice, and the Treasurer, are appointed by the Kabaka, but the assent of the Governor is necessary to their assuming office. The Lukiko itself is constituted on oligarchic rather than on popular lines. It consists of the three ministers, the county chiefs, or their representatives, three notables nominated by the Kabaka from each of the counties, and six other notables nominated by him from the country at large.⁶ Attempts have from time to time been made to secure the introduction of a more independent element, a measure to which the existence of an educated class in Buganda gives unusual importance; but so far these efforts have not been successful.

For administrative purposes the kingdom is now divided into twenty counties, each under a *saza* chief; each county is divided into districts, containing from one thousand to four thousand people, under a *gombolola* chief, who is subordinate to the *saza* chief; under the *gombolola* chiefs are *muruka* or village chiefs. In the original organization of Buganda the chiefs, though they owed their position to appointment by the central (native) government, had something of a feudal position in the areas they controlled; they had, as representatives of the Kabaka, authority in regard

¹ Judicial Agreement, 1905.

² i.e. lands held under the type of tenure embodied in the Agreement of 1900.

³ *Busulu and Envujo* Law, 1927.

⁴ *Luwalo* Law 1930, and *Luwalo* (Amendment) Law, 1931. See also Chap. XI, p. 612.

⁵ Land Succession Law, 1912. See Chap. XII, p. 762.

⁶ Article 11, Agreement of 1900.

to the distribution of land; they were entitled to a share of the produce as tribute and to services on their own lands; their posts were often in practice of an hereditary character. The grant of proprietary rights over the mailo lands, and the substitution of fixed salaries for tribute, have deprived them of any powers in regard to land, save where they are themselves proprietors; though hereditary claims may be at times acknowledged in making appointments, the chiefs have not necessarily any family connexion with the areas in which they serve; they are subject to transfer and promotion; a system of pensions has been instituted for them, and a regular staff list is issued by the Buganda Government. Their appointment rests in the government of the Kabaka, but under the Agreement (article 9) the names of the *saza* chiefs must be submitted for approval to His Majesty's representative. By a series of agreements modifying the original treaty of 1900, a sum for the salaries of the Kabaka, the ministers, and the chiefs is provided by government based on a maximum of 25 per cent. of the total poll-tax collection. In the estimates for 1938 provision has been made for £30,880.

The revenues controlled by the Kabaka's government are derived from the proceeds of the commutation of *luwalo*,¹ or compulsory labour for communal purposes, the land tax, fees and fines from the judicial courts, market dues and licences, and other fees; the total estimated income for 1935 was £128,638, to which the *luwalo* commutation contributed £75,853. Apart from the sum received from the protectorate government in lieu of a proportion of poll-tax, the whole of these revenues may be said to be derived from sources controlled by the Lukiko itself, independently of government. The budget is prepared by a finance committee of the Lukiko; it is subject to the approval of the Governor, and major reappropriations are approved by the Provincial Commissioner as the representative of the Governor, but it is not otherwise controlled. The accounts are maintained by the Lukiko Treasury Department, but by agreement with government are now audited by an official auditor. The budget, printed in the Luganda language, is published annually. The expenditure for which it provides is mainly for the Kabaka's

¹ Cf. Chap. XI, p. 619, and Chap. X, p. 575.

ministers, judicial and administrative establishments, public works, police and prisons, markets and sanitary inspection; the Buganda authorities are not themselves responsible for medical and educational activities, though their budget provides grants to the District Boards of Education for sub-grade and elementary schools, and a reimbursement of £1,600 per annum is made to the protectorate government towards the cost of medical stores for sub-dispensaries, and over £5,000 was provided in 1937 for the erection and maintenance of dispensaries and maternity centres. The result, however, is that an unduly large part of the budget is devoted to establishment and 'overhead' charges. There is an efficient head-quarters office, which maintains the judicial and administrative records; also treasury records on the lines adopted in British territory, and a replica, of somewhat doubtful effectiveness, of the mailo land registers of the protectorate government's Office of Titles.

The Lukiko, though it only sits annually for legislative purposes, is in perpetual session for administrative and judicial work, the place of the *saza* chiefs being then taken by their representatives, usually *gombolola* or other subordinate chiefs. The court of the Lukiko consists of the Kabaka, President; the Mulamuzi (Chief Justice), Vice-president; the Katikiro (Prime Minister), and the Muwanika (Treasurer), *ex-officio* members; and three members appointed by the Kabaka with the approval of the Governor. Subject to the condition mentioned below, it has full powers in criminal cases, including the passing of a death sentence, and an appeal lies to it from the subordinate courts. These are the courts of the *saza* and *gombolola* chiefs; the *saza* chiefs have criminal powers of up to one year's imprisonment or twenty-four strokes, the *gombolola* up to three months, or ten strokes. The courts consist in each case of a bench of chiefs, presided over by a *saza* or *gombolola* chief or his deputy as the case may be; they are not constituted on the model, common to Tanganyika or Nigeria, of assemblies of elders presided over by a chief. They maintain unusually complete records, and there is a regular system of appeal up to the Lukiko court. Prisoners are confined in native prisons for which the Buganda administration is responsible, though convicts with sentences over two years are usually transferred

to the protectorate jails; the prisons are inspected by British officers, but no warrant from the latter is needed for commitment of prisoners to them. The Buganda courts have no jurisdiction in cases concerning the ownership of land registered under the Registration of Titles Ordinance, and it has been explicitly agreed that cases relating to the headship, membership, or other matters affecting clans are to go direct to the Kabaka and Lukiko.¹ Native courts in Buganda are now governed by proclamation under the Courts Ordinance,² which confirms such provisions of the Agreement of 1900 and the Judicial Agreement of 1905 as it does not supersede. In all cases involving property of over £100 in value, or sentences of over five years' imprisonment or of death, the Lukiko must refer the matter to the consideration of the Kabaka, 'whose decision when countersigned by His Majesty's chief representative in Uganda shall be final'. Both the Provincial Commissioner, or in his absence a District Commissioner or any other Magistrate, and the High Court are empowered to revise the proceedings of the Lukiko court. An appeal may also be taken to the High Court of Uganda in all criminal matters where a sentence of death or of imprisonment for more than five years or corporal punishment of over twenty-four strokes has been imposed, and in all civil matters where the subject-matter of the suit exceeds one hundred pounds. In any case, where any of the parties is not a native of Buganda there is a right of appeal to the High Court. A District Commissioner is given certain powers of supervision over native courts other than the Lukiko, including power to call for records, to stay proceedings, to direct re-hearing, or to refer the case for revision by the next highest native court; these powers are vested also in the High Court.

The agreements with the Mugabe of Ankole and the Mukama of Toro, concluded shortly after that with Buganda, and that with Bunyoro, which for political reasons was not made till 1933, recognize native administrations similar to that of Buganda, but on a smaller scale, and with less extensive powers. The Lukikos have, subject to the consent of the Governor, legislative powers, but only in regard to native law.³ As from the beginning of 1937

¹ Uganda (Clan cases) Agreement, 1924.

² *Revised Laws*, 1935, vol. iv, p. 340.

³ Native Law Ordinance, 1919.

40 per cent. of the poll-tax in Toro and Ankole is paid to the native administrations. While there is no definite condition in the Toro and Ankole agreements that the budgets should be submitted to the administration, this is done, and a provision to this effect is made in the Bunyoro Agreement. The budget estimates of these three 'native governments' showed for 1937 a total revenue of £58,895, and an expenditure of £55,039. The organization of county and district chiefs is similar to that of Buganda; their appointment vests in the paramount chiefs, but in practice they are approved by the Provincial Commissioner. The judicial powers exercised by the various courts are on a lower scale than those of Buganda, but gombolola courts in Bunyoro have greater powers than equivalent Buganda courts. Appeals go to the district court, usually, but not necessarily, presided over by the District Commissioner, who has also a full power of revision; the High Court here exercises only a power of revision and not of appeal. The Bunyoro Agreement introduces a further condition, that the courts must be constituted by the Governor and their powers prescribed by warrant.

Outside the Buganda kingdom and the three 'native governments' no central political organization exists which recognizes a hereditary paramount chief; and at one time the protectorate administration nominated Buganda agents to chieftainships outside their own districts or placed local chiefs under their tutelage. That system had its uses, but the agents have now been withdrawn. The government has, however, reproduced much of the Buganda system in these areas, though without any attempt at rigid standardization. In the Acholi District, into which the former Gulu and Chua Districts were amalgamated in 1937, two tribal administrations exist. Similarly, the Central District, formed by the amalgamation of Bugishu and Bugwere, retains the two original native administrations. In the west, however, the tribal councils combine to form a district council, and there is a single native administration for the whole district. Districts are divided into counties under a chief who bears the name of *saza* or its equivalent, and they are also divided into smaller units, similar to those of the gombolola or *muruka* divisions of Buganda. Where the hereditary principle is of long standing, as, for instance, in Busoga, or where certain clans have furnished sections of the

community with their leaders, as in Acholi, these traditions are taken into account in appointing the county or district chiefs. But the chiefs are not, as in some areas under indirect rule, necessarily the traditional leaders recognized by native custom; they owe their position to selection, in which ability and education are taken into account; but almost every chief to-day is of the same tribe, and often of the same subdivision, as his subjects. Local opinion is as far as possible consulted in making these appointments. The Lukiko or district council is composed of the county chiefs, who select their own president. In certain areas elders are admitted in addition to the chiefs, and the councils are likely in the future to include an increasing degree of popular representation. The native authority revenues are derived from a rebate on the poll-tax, which is normally 20 per cent. from luwalo commutation where this practice exists, and from local dues. In these areas the budget is prepared by the District Officer after consulting the Lukiko; the latter has only the competence of an advisory body. The total income of the eleven native authorities of this type was in 1937 estimated at £255,845. The district councils are, under the Native Authority Ordinance,¹ entitled to issue orders having the force of law for certain specified purposes. In certain cases also the councils are authorized to make rules defining or modifying native law and custom; but this power seems to be little used in practice. The ordinance imposes on chiefs the obligation to detect and prevent crime (an obligation in which they are assisted by their own police, as provided by section 4 of the ordinance) and to issue orders for a variety of specified purposes, including the making of reserves of food against famine, the eradication of insect pests, and the use of compulsory labour on public works. The constitution and jurisdiction of courts are governed by a series of proclamations under the Courts Ordinance,² the district native court, or the court of the Lukiko, being the court of appeal for the area; supervisory and appellate jurisdiction is exercised by the District Commissioner in his magisterial capacity. The court in these areas consists of a bench of chiefs and there are rules prescribing the quorum in each area.

¹ *Laws (Revised Edition)*, 1935, cap. 112; *Native Law Ordinance*, 1923.

² *Revised Laws*, 1935, cap. 39.

Uganda, as will have been seen, makes a very full use of native authorities as agencies of local government; there are, however, significant points of difference between its policy of native administration and that of Tanganyika or Nigeria. The distinction does not lie entirely in the attitude adopted towards traditional native institutions; the political organizations of Buganda, Toro, Ankole, or Bunyoro have a long history, and are as fully accepted by the people as those of Northern Nigeria. The characteristic difference lies in the policy of appointing the county or subordinate chiefs, and in the growth of a system under which they have taken in Buganda, and tend increasingly to take elsewhere, the character of an official service working within the native administration system. In Uganda, in a large part of which the Hima organization had already imposed itself on the older clan institutions, such a development was natural; the Buganda system of rule was in itself largely one of direct administration. The chiefs appointed under this system appear to lack neither authority nor influence. The experience of Uganda would seem to prove that the successful use of native authorities in local government cannot be determined on any one principle; there seem to be circumstances in which the appointed chief can be as efficient an agent in native administration as the hereditary or tribal chief. The study of the Uganda system, however, presents another problem, peculiar to Uganda itself. The construction placed in practice on the Agreement of 1900 has created an unusual situation in regard to the Buganda kingdom. The terms of the Agreement do not, on the one hand, appear to permit of that full integration of the native administration with the institutions of the protectorate government which is possible in Nigeria; the existing practice, on the other hand, does not seem to give to Buganda that autonomy over its own internal affairs which might appear to be contemplated by the Agreement. There are now some eleven administrative officers serving under the Provincial Commissioner in Buganda Province, and apart from the supervision exercised by them over the work of the subordinate courts, their presence necessarily involves direct relations with the *saza* and *gombolola* chiefs in their administrative work. They control tax assessment and collection and are concerned in the carrying out of such of the

protectorate ordinances as apply to Buganda. Again, the Buganda native government is not responsible for educational, agricultural, or medical activities; there is inevitably some intervention by officers of the central departments in Buganda affairs. In theory the position of the protectorate officers in such matters is that of advisers; in practice they take a direct part in Buganda administration, though the manner in which this is exercised is perhaps less openly marked than it was at an earlier period, particularly in regard to such matters as the transfer of *saza* and *gombolola* chiefs. The relations of the Kabaka and his ministers with the protectorate government have in the past been such that the question of the correct interpretation of the Agreement of 1900 has presented no great difficulties; but it may be questioned whether the present system, apart from any question of the interpretation to be placed on the Agreement, takes full advantage of the opportunity offered by the Buganda organization as a training-ground in administrative responsibilities.

XII. NORTHERN RHODESIA

In Northern Rhodesia some seventy tribes roughly fall into five groups according to their allegiance, languages, and customs. It is not uncommon to find a group of villages of one tribe surrounded by villages of another tribe, or that tribes extend into neighbouring territories, and have a paramount chief residing in a foreign country. Each of these tribes had its own system of native government, varying from the highly centralized government of the Lozi to small chiefs with only two or three subject villages.

The policy of the Chartered Company, save in respect of the treaty state of Barotseland, was one of direct rule, using the existing chiefs as agencies of government, but upholding their privileges so far as these were not incompatible with company rule; little or nothing was done towards amalgamating petty authorities to enable more effective administrations to develop; and the general effect of the policy was to preserve the outward form of the indigenous systems, but to undermine the authority of the chiefs both by making them dependent on the Administrative Officer and by taxation which obliged large numbers of men to leave their villages for considerable periods for work. At first the company confined itself

to the prevention of inter-tribal wars, the collection of tax, and the removal of the administration of justice from the hands of the chiefs; in 1908 rules for the administration of natives defined the relations between the government and the natives. The amalgamation of North-Eastern and North-Western Rhodesia took place in 1911, and the former rules were replaced by the Administration of Natives Proclamation of 1916. This proclamation made provision for the appointment and dismissal of recognized chiefs by government, and defined their duties, but the Administrative Officer was held responsible for the general control of his district, and failure to carry out his 'lawful' orders was punishable in the case of chiefs and headmen; natives were required to carry out 'reasonable' orders or requests of both the chief and the native commissioner, and under this provision chiefs were able to exercise a considerable amount of control over their people in exacting customary free labour in their gardens and even in the recruitment of paid labour for government; chiefs were paid small subsidies by government.

In 1924 company rule ceased, the territory became a British protectorate, and the recommendations of the commissioners appointed to advise on the delimitation of native reserves¹ attracted attention to the importance of allowing the natives a larger measure of self-government in their tribal areas. The appointment of Sir James Maxwell, whose previous experience had been on the West Coast, paved the way for the introduction of a policy of native administration more in accordance with that already existing in other territories under the Colonial Office. A conference of administrative officers convened in 1927 made recommendations regarding the introduction of a system of indirect rule, and was followed by ordinances constituting native authorities and courts, introduced in March 1929 and put into effect in the following year.

The Native Authority Ordinance conferred powers similar to those given in Tanganyika, including the issue of 'orders' relating to a specified range of subjects and enforceable in a native court, and the making of 'rules for peace, good order and welfare'; it is noticeable, however, that it omitted any reference to native treasuries, a reflection of the recommendation of the conference,

¹ See Chap. XII, p. 740.

which did not consider the growth of financial responsibility desirable, at least for some considerable time.

Where definite tribal organizations existed, such as among the Wemba and Ngoni, unofficial native authorities and courts were already functioning and, as the Secretary for Native Affairs remarked in 1930, all that was required was to explain the working of the new system and to foster the exercise of the increased administrative powers vested in the authorities by the ordinance. In other areas the process of constituting native authorities was not easy; the chief had often degenerated in the eyes of his people into a *kapitao* in the employment of District Officers, and in some areas it was difficult to find any evidence of tribal cohesion; the absence of large numbers of the adult male population for long periods at work, the multiplicity of chiefs and tribal divisions, and the unsatisfactory character of many of the chiefs, left the native authorities, as before, agents of the general administration rather than organs of self-government. The existence of councils in the tribal organization does not appear to have been fully appreciated at the time, though the character of a council is often more important than that of a chief.

The Native Authority Ordinance of 1929 was replaced in 1936 by a new ordinance,¹ which does not differ greatly in substance, but lays stress on the need for making full use of the traditional native machinery of government. Provision was made for future development, such as the setting up of native councils in the non-native areas, and for the establishment of native treasuries and the levy of local rates. Treasuries are now in process of establishment. The 1936 Report on Native Affairs notes that sections of tribes which had previously been divided have shown a readiness to combine into units with superior councils, to enable more substantial treasuries to be formed than would be possible if the previous divisions were allowed to remain. A circular issued by government in 1936 lays down instructions in connexion with this development; native treasuries are to receive 10 per cent. out of the taxes paid by natives of their areas, whether in the districts of origin or elsewhere, the latter provision being of particular importance in a country where a large percentage of taxpayers pay at their place

¹ Native Authority Ordinance 9 of 1936.

of work: the treasuries are to be tribal for the most part with sub-treasuries where the tribal unit is large. The recent committee on taxation has recommended that instead of 10 per cent. of the tax a fixed sum of 1s. 6d. per tax should be paid to the treasuries. The revenues, apart from the percentage of native tax, are of two sorts, those the authorities collect on their own behalf, such as court fines and fees, and those which they collect for government, such as game and other licences; the latter will be paid into general revenue, but are to be repaid from general revenue to the native treasuries. The payment of fines in kind is discouraged. The salaries of chiefs are to be paid from the treasury funds and are calculated according to the status of the unit as expressed by the gross amount of the tax which it pays. Sir Alan Pim has pointed out that the treasury revenues are no more than sufficient to provide a reasonable standard of pay for chiefs and their clerks and messengers. The chiefs have lost the right to unpaid labour, which formerly enabled them to maintain reserves of food for the numerous calls on their hospitality,¹ and have received no compensation; their present salaries do not enable them to meet their obligations. He suggested that the proportion of the tax paid to native treasuries should be raised to 20 per cent.² In 1938 a provision of £30,000 was made for a central treasury fund from general revenues, and it is hoped to make similar provision in 1939. Certain revenues from land in reserves are to be merged into this fund, which will be used for development schemes and, as in Nyasaland,³ for assistance to impecunious treasuries. As in Tanganyika Territory, the lack of experience among the chiefs has necessitated a close measure of control and it is not to be expected that native administration treasuries can be effectively administered by the native authorities themselves at this stage: this is recognized in the circular already referred to, and the extent to which it is possible to devolve responsibility on chiefs of widely different degrees of ability and civilization must vary considerably. The power to make orders has been extensively used, but the nature of these reflect rather the influence of the Administrative Officer than that of native custom and traditional practice.

¹ Cf. Chap. XI, p. 609.

² *Report on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, pp. 186-7.

³ See below, p. 464.

The Native Courts Ordinance of 1929, also brought into force in 1930, found a more favourable field for development than the Native Authority Ordinance. The chiefs had, even under the rule of the Chartered Company, continued to exercise jurisdiction, particularly in civil matters, with the encouragement of the company's officials, and in most parts of the country civil cases were taken to the European courts only when there was dissatisfaction with the chief's ruling or when, owing to the chief's lack of authority, it was not possible to obtain enforcement of judgments. The ordinance of 1929 was of an experimental nature and was replaced by the Native Courts Ordinance of 1936. Jurisdiction and powers are given by warrant; stress is laid on the character of the courts as traditional institutions in which practice is to be in accordance with native law and custom; they are now 'recognized', not as in the previous ordinance, 'appointed', and provision is made for a regular system of appeal to native courts of appeal, thence to the magistrates' court, and finally to the High Court.

The geographical and economic detachment of the Barotse Province of Northern Rhodesia, often called Barotseland, and the character of its native institutions, have given it a type of native administration which has similarities with that of the High Commission territories. The European population numbers only 200; most of the province has been reserved from prospecting for minerals;¹ the native society has a well-established type of centralized rule. The political power is in the hands of one dominant tribe, the Lozi, and hitherto many of the subject tribes have had little share in the management of affairs. Except in the western part of the Balovale District, the land is vested in the paramount. The country is divided into districts over which the paramount places indunas who are usually Lozi and often members of the ruling family; in areas where subject tribes have their own chiefs the indunas represent the authority of the paramount. This system has led to considerable discontent among tribes such as the Lundi and Lorele in the extreme north-west of the province and a demand for independence from the alleged misgovernment of the Lozi indunas. These two tribes also dispute the suzerainty of the

¹ See Chap. XXII, p. 1521.

paramount. The dispute is as yet unsettled. Lozi rule has some of the characteristics of constitutional government. The paramount is subject to the control of the Kgotla, which is both a legislative and a judicial body; it has a Prime Minister appointed by the paramount, and thirty members representing both the head-quarters and the provincial centres. The decisions of the Kgotla are put before the paramount, who considers them with the aid of a family privy council, the Sikalu. There is a regular system of local Kgotlas, on which the paramount is represented by his indunas; judicial appeals from them go to the central Kgotla.

Barotseland came under protection as the result of an agreement made in 1890 by the Paramount Lewanika, one of the outstanding figures of African history. When in 1891 the operations of the British South Africa Company were extended north of the Zambesi, the administration of justice in Barotseland was not entrusted to the company; in accordance with the Africa Order in Council, 1889, it was to be in charge of a commissioner, but the first such officer did not arrive in the territory till 1897. In 1900 the company made an agreement with Lewanika, which the Secretary of State approved in 1901; it was concluded as a 'treaty or alliance' between the Barotse nation and the British government, and has formed the basis of subsequent developments. The company obtained the right to adjudicate in all cases between Europeans and Africans, cases between natives being left to the native authority. The paramount retained his customary rights, and was to be paid £850 a year by the company. This agreement and a subsequent agreement of 1909 reserved Barotseland from prospecting, and provided that European immigration was not to be allowed save with the consent of the chief and his people. In 1911, when North-Eastern and North-Western Rhodesia were amalgamated under the company, the Order in Council provided that it should be unlawful to alienate any of the areas reserved from prospecting. When it was proposed to utilize the powers conferred by an Order in Council of 1900 to impose taxation, the Secretary of State required that the assent of the paramount should first be obtained; the arrangement finally concluded in 1905 was that 10 per cent. of the tax from north-western Rhodesia should be paid into a fund for use on works to benefit the native inhabitants of Barotseland,

subject to the payment of a subsidy to the paramount in lieu of his previous right to tribute from subject tribes. In a letter of November 8 of the same year the paramount agreed that the British courts should have the power to decide civil and criminal cases between natives, except in a reserved area, where they would have jurisdiction only over cases of murder and of any other offence against the law of England, such as witchcraft. By further agreements, and in virtue of Proclamations 2 and 3 of 1913, the chief and his Kgotla received in the greater part of Barotse Province full powers in civil proceedings affecting natives only, and full powers in criminal proceedings affecting natives except when the offence was punishable according to the law of the territory with death, or imprisonment exceeding six months, or lashes exceeding twelve; it is of importance to note that this arrangement did not provide for any supervision of the proceedings of the native Kgotlas, nor for any formal right of appeal. In 1924 it was agreed with the paramount that he should abandon the previous system of exacting twelve days' compulsory unpaid labour from his subjects; he received in return an annual allowance of £2,500, of which £2,000 went to the chiefs and indunas who had shared the privilege. In 1925 a Barotse Trust Fund was established by an ordinance¹ under which the fund received, instead of the 10 per cent. referred to above, a sum representing 30 per cent. of the tax collected from the natives of Barotse Province. The fund was administered by a board consisting at first of five government officers and two missionaries; in 1933 a revised constitution provided for three government representatives, the paramount chief, and a fifth member nominated by him in consultation with the Provincial Commissioner.

The system thus developed was one which involved a relatively minor degree of intervention from the administration, and it is noteworthy that at each successive stage any change introduced was effected by agreement with the paramount and his Kgotla. The system involved little friction between the British and native authorities, but it revealed some difficulties. The native courts, in the absence of any legal sanction behind them, had trouble in enforcing their decisions; the right of appeal to the central

¹ Barotse Fund Ordinance 18 of 1925.

Kgotla was ill defined, the sphere and jurisdiction of the magistrates' courts were ambiguous, and there were difficulties in allocating the sums due respectively to the paramount and the indunas and for public expenditure. It was these considerations, rather than the more deep-seated difficulties to which reference has been made in dealing with Bechuanaland, which led the government of Northern Rhodesia to enter on discussions with the Lozi for a revision of the existing system. Their agreement was obtained in 1936, and the Barotse Native Authority and Native Courts Ordinances took effect in January 1937.

The first ordinance¹ provided for the recognition of native authorities by the government, and for the withdrawal of such recognition 'on the recommendation of the Paramount Chief'. The extent of the powers conferred is to depend also on the paramount's recommendation. Withdrawal of recognition may be accompanied by an order to leave the area in which the holder of the office has exercised jurisdiction. The powers of native authorities include the regulation of matters affecting social and economic welfare, and extend to the suppression of practices which are harmful or contrary to native custom; the Governor may, after consultation with the paramount, himself issue any order or rule which the native authority has omitted to make, or may, after similar consultation, revoke any order or rule issued by it. Under this ordinance, the paramount and his Kgotla have been recognized as the supreme native authority for the whole province, and seven local Kgotlas recognized as subordinate native authorities. Corresponding changes were made in the administration of the Barotse revenues; the Trust Fund was taken over by a central native treasury,² which has sub-agencies in the districts, and is controlled by the paramount and Kgotla, subject to the supervision of the Governor, to whom estimates are submitted for approval, and of the Commissioner, who countersigns all cheques. The estimated revenue in 1938 was £13,446, of which nearly £8,666 was for emoluments to indunas and members of the chief's family. On the judicial side an ordinance³ confers jurisdiction

¹ Barotse Native Authority Ordinance 25 of 1936.

² Ordinance 27 of 1936.

³ Ordinance 26 of 1936.

upon 'recognized' courts, but their constitution is to be determined by local law and custom; on the recommendation of the paramount a member may be suspended or dismissed. The courts have civil and criminal jurisdiction in native cases to an extent defined in their warrants, though the boundary between the two is far from clear; there are no powers of supervision in civil cases; their criminal powers do not include cases punishable with death or, except with the approval of the District Commissioner, relating to witchcraft. The courts administer native law, the orders and rules made under the Barotse Native Authority Ordinance, and any law included under their jurisdiction by the Governor. A report of all criminal cases must be submitted to the administration, and administrative officers have full power of revising the decisions of the tribunals. Provision is made for appeals to a Native Court of Appeal and thence to the Provincial Commissioner's Court, or, in civil cases, to the High Court. Two superior courts have been recognized, and in the institution of subordinate courts the opportunity has been taken to eliminate a number of superfluous tribunals. The ordinance removes any doubt as to the jurisdiction of the government courts, and provides a legal process whereby native courts are enabled to enforce their judgements.

Conditions of native life in Northern Rhodesia are affected by the presence of a mining industry which employs about 15,000 men¹ mostly drawn from the country itself, and large numbers of the male population also leave the country for work in neighbouring territories. Some 50 per cent. of the adult males are said to be absent from the villages of some districts at one time.² Again a large urban native population lives outside tribal control and in the European farming area, remaining for periods of varying lengths away from the influence of the native authorities and of tribal life. The European population of 10,588 is greater than that of the other East African territories except Kenya, but it differs from that of Kenya in that a relatively large proportion is engaged in industry and the resident farming population is less numerous. The European representatives in the legislature have directed their attention to the government's alleged neglect to provide adequate

¹ See below, p. 514.

² *Report*, op. cit., Colonial 145, p. 36.

medical and other services for the natives rather than to discussions of native policy as such.¹ The economic interests of native and European do not yet conflict to any degree; the lack of agricultural development among natives has left them dependent on the labour market for earning money, except in a few districts where proximity to the railway line has allowed their entry into the maize market, but it is significant that under pressure from European maize growers competition has been eliminated by means of a Maize Control Ordinance² which fixes the price and the quota of maize for both natives and Europeans.

These factors are not without importance in the future development of local native government through the customary authorities. Northern Rhodesia will provide a significant test of the question whether native authorities are able to maintain the respect and interest of a population which is subject to the powerful influence of industrial and urban life.³ The numerous natives living in urban conditions create a problem of a different class, but of no little importance; it will be discussed in a subsequent section of this chapter.

Under the Chartered Company the Native Affairs Department was controlled by a Secretary for Native Affairs who was responsible to the Administrator and had a seat in the advisory (later the legislative) council. This post was abolished in 1934, and native affairs are now dealt with in the Secretariat by an assistant Chief Secretary for Native Affairs. The Senior Provincial Commissioner has a seat in the legislative council and is the government's principal adviser on native matters. There is no separate staff dealing purely with native affairs; the local administrative staff (Provincial and District Commissioners) deal with both non-native and native affairs. In areas where European interests are predominant, such as on the copperbelt, their time is largely taken up by non-native matters, a difficulty which, in the absence of native institutions, the government has attempted to meet by an increase of European staff.

¹ *Debates of the Legislative Council*, 1934; First Session of the 5th Council, 1935, pp. 201-2.

² Ordinance 20 of 1935.

³ See below, pp. 512-15.

XIII. NYASALAND

The early records of the Nyasaland Protectorate make frequent reference to the difficulty of finding native authorities who could be utilized for the purposes of the administration. The government of the British Central Africa Protectorate had recognized to some extent the position of those chiefs with whom it had made treaties; they received a subsidy of 10 per cent. of the hut tax in lieu of tribute, and a few chiefs were also given annual allowances in compensation for the abrogation of their rights to levy tolls on passing caravans. The introduction of direct tax collection by district officers, and the gradual cessation of the allowances on the death of the original recipients, left chiefs and headmen without a fixed income, and their status suffered a general decline. There were, moreover, other circumstances which militated against the development of a system of local government based on traditional authorities. The original inhabitants of a large part of the country had been reduced to subjection by Ngoni and Yao invaders; the invading tribes themselves were split into small groups, and some of their more prominent chiefs had at one time or another been in conflict with the government. In 1904 the Nyasaland government commented not only on the absence of chiefs on whom it could rely for assistance, but on the tendency for the larger communities to disintegrate; small men were apt to 'collect a surrounding of friends and to go off and build new hamlets in other localities'.¹ Tribal leaders still arbitrated in disputes between their followers; but in other respects it was considered that the customary institutions had largely broken down. There was another factor which operated against the use of native authorities; considerable areas had been alienated to Europeans,² and in some districts, notably Zomba and Blantyre, a large proportion of the population was resident on European estates. Nevertheless the government wanted agents who could assist the local officers in the work of administration. The satisfaction of this need, however, was not sought in an attempt to restore the influence of the traditional authorities; the District Administration (Native) Ordinance of

¹ *Annual Report on the Protectorate, 1903-4.*

² See Chap. XII, pp. 755-9.

1912 was designed to 'supply a salutary measure of discipline and control in village life to replace the old system of tribal rule by chiefs, which has fallen into decay with the evolution of native life and the passage of time'. It provided for 'the gradual formation of a subsidiary local government by means of sectional councils of headmen chosen as far as possible by the natives themselves and presided over by the District Resident', but the position of headman was to be in no sense 'similar to the archaic one of chief'. For this purpose districts were divided into administrative sections under charge of principal headmen, the section being in turn subdivided into village areas or groups of villages in charge of village headmen. The sectional council consisted as a rule of the principal headman and two councillors selected from among the village headmen; but it is characteristic of the system that the sections did not necessarily coincide with tribal boundaries. The district officers had power to require the concentration of huts in order to form villages. The principal headmen were chosen as far as possible from the recognized tribal or territorial chiefs; but the ordinance permitted Residents to consider also the claim of persons of good standing, intelligence, and reputation. Principal and village headmen were paid, but on a very low scale; though the existence of native courts was recognized, they were given no statutory position, and headmen were given no judicial authority, though they were used as assessors in native cases; their administrative functions were mainly confined to carrying out police and sanitary regulations and the improvement of village communications. The sectional councils derived their authority from the District Resident, who presided over them. The ordinance was not applied in the first instance to the districts in which large areas of land had been alienated to Europeans; it was not, indeed, till a much later date that some of its sections were extended to such areas. An Ordinance of 1924¹ gave to the headmen the new power of calling out compulsory labour for public works, and it also constituted a series of village, section, and district councils, consisting of nominated headmen and others; their functions were purely advisory. An Ordinance of 1929² made provision for native

¹ District Administration (Native) Ordinance, 1924.

² Courts Ordinance, 1929.

courts, in the form of section courts presided over by a principal headman.

The system embodied in these ordinances was directed to remedy conditions which were held to be due to the disintegration of the traditional institutions; the function assigned to the native authorities which it created was that of auxiliaries to the administration, and it made no effort to institute responsible agencies of local self-government. The institution of a more effective system of local self-government was advocated by the Northern Nyasa Reserves Commission of 1929, and by a conference of administrative officers in 1930; and a substantial revision of the existing system was effected by the Native Authority and Native Courts Ordinances of 1933. The former of these two ordinances resembles that which regulates the position of native authorities in Tanganyika, but it provides also for the temporary suspension of a recognized native authority and for the removal from their tribal territory of chiefs whose 'recognition' has been withdrawn. The ordinance did not in practice involve any considerable change in personnel. For the most part the chiefs recognized under it as native authorities were those who had been principal headmen, but it involved the abolition of the former artificial division of tribal areas into administrative sections, and the opportunity was also taken to make some readjustments in the light of actual tribal conditions. The tribal organization of the Ngoni, neglected under the former system, was revived, and elsewhere, as among the Tumbuka, the claims of the traditional chiefs were given a fuller recognition; among the Tonga in West Nyasa a tribal council was substituted for the four principal headmen. The native treasuries instituted under the ordinance are credited with a specific contribution of $8\frac{3}{4}$ per cent. of the tax collected, which is allocated for the payment of chiefs. Their general resources are drawn from court fines, and from a proportion of rentals received from tenancies in native areas fixed in 1936 at 25 per cent., the remaining 75 per cent. being paid into a central fund from which grants may be made to the poorer treasuries, and for financing capital works such as building of shelters for travelling natives, rural dispensaries, and bridges. In these circumstances the native authorities have little scope for expenditure; the share

of the tax allocated to the payment of chiefs is the largest item both of revenue and expenditure. The treasuries of the Southern Province had in 1935 a total revenue of £3,886, an average of only £880; the ten treasuries of the Northern Province had a total income of £9,142, but of this the expenditure on chiefs' salaries and other personal emoluments amounted to no less than £6,908.

The ordinances of 1933 represent an attempt to introduce in Nyasaland the methods associated with indirect rule. That attempt has already met with some success. Experience has shown that the tribal institutions have a greater vitality than was assumed in the earlier days of the protectorate, and that chiefs still exercise an authority which can be used to good purpose. On the other hand, the system is still at an experimental stage, and it has to overcome conditions developed under the previous system of direct administration. It is perhaps inevitable in the circumstances that the administration should, at the outset, have hesitated to give any large measure of responsibility to the native authorities; the direct collection of the tax by officers of the administration, and the decision to make the native treasuries depend on local resources for their finance, result in giving the native authorities a limited range of powers as compared with those of Nigeria and Tanganyika.¹ But the experiment is of unusual interest in view of the special circumstances of Nyasaland. The wide extension of education, mainly of a type designed to fit the native for employment under Europeans, and the existence of a relatively large proportion of natives with experience of residence in other territories,² tend to create an element which is likely to be critical of traditional authorities, if not indeed antagonistic to them. The future of the system of native administration now in force will be largely determined by the attitude taken by this element.

XIV. THE GOLD COAST

The system of government in the Gold Coast has been described as 'a mixture of direct and indirect rule, with a steady bias towards the latter'.³ If, however, there is a bias towards the methods

¹ For duties of native authorities in connexion with taxation, see Chap. X, pp. 566-7.

² See Chap. XI, p. 607.

³ *Annual Report on Social and Economic Progress, 1935-6*, p. 6.

of indirect rule, it is more evident in the Northern Territories Protectorate than in the Gold Coast Colony. The early history of the Gold Coast administration was one of hesitating and unwilling intervention in native affairs outside the forts in which trading interests were concentrated. The Akan chiefdoms or 'stools' were well-established political organizations, and the establishment of treaty relations with them appeared more expedient than the extension of administrative rule. Farther north the Ashanti confederacy was of a strength which enabled it not merely to resist political interference, but indeed for many years to defeat invasion. Such control as was attempted in regard to the Akan chiefdoms was in the first instance limited to the establishment of a court, presided over by the Governor, with chiefs as assessors, to deal with disputes arising in the tribes. At the time the court was established, about 1831, it had no legal basis,¹ though its decisions were readily accepted owing to its superiority over the system of justice obtaining in the chiefdoms. The passing of the first Foreign Jurisdiction Act in 1843 provided a means for giving a legal position to the court; but the government, following the advice of a Select Committee of the House of Commons in 1842, preferred to base its jurisdiction on agreement with the chiefs,² and this was effected in 1844 in the agreement known by the name of 'The Bond'. The agreement was itself of little intrinsic value, though it subsequently acquired some importance as the basis of the claim that any levy of taxation must depend on the 'consent of the chiefs and their people'.³ It was, however, accepted as justifying the issue of the Order in Council of 1844, which, after reciting the terms of the Foreign Jurisdiction Act of 1843, established the jurisdiction of government officers in regard to cases arising outside the forts.

When in 1852 the administration sought to secure by direct taxation the means for extending educational and medical services in the native areas, the chiefs were invited to organize themselves into a legislative assembly of native chiefs for the purpose of imposing the tax on their subjects; as shown elsewhere,⁴ it was found

¹ Sir W. B. Griffith, *Note on the History of the British Courts in the Gold Coast Colony*, 1936, p. 1.

² Sir W. B. Griffith, *op. cit.*, pp. 11-12.

³ *Papers relating to the Petition of the Delegation from the Gold Coast Colony and Ashanti*, 1934, p. 28.

⁴ Chap. X, p. 585.

impossible to collect the tax and the ordinance imposing it was repealed in 1866. The spirit in which the British government envisaged its relation to the chiefs was again illustrated by a recommendation made by the Select Committee of Parliament appointed in 1865 to consider the future of the West African establishments. It asserted that the extension of 'the protectorate of tribes about our forts in the Gold Coast assumes an indefinite and unintelligible responsibility on our part, uncompensated by any adequate advantage to the tribes', and recommended 'that the Protectorate should only be retained while the chiefs may be as speedily as possible made to do without it. Nothing should be done to encourage them to lean on British help, or to trust to British administration of their affairs.'¹ As regards justice, the chiefs should be left to exercise their own jurisdiction, subject to an appeal when necessary to the English magistracy.

The views of the Select Committee reflected the spirit of the current British policy in regard to colonial affairs; its primary concern was with the facilities which native territories offered for the expansion of trade, and it sought to limit its obligations to securing such order as was needed for this purpose. The policy was impossible to maintain in practice. The maintenance of order necessitated a control over the chiefs which prejudiced the traditional organization of tribal authority; the provision of even the most elementary system of justice created claims which involved a progressive measure of intervention. In the Gold Coast there was an additional circumstance which brought conviction of the impossibility of maintaining non-intervention. The Ashanti War of 1873-4 demonstrated that in the interests of peace itself it was essential to govern the native territories. The institution of a legislative council for the Gold Coast Colony in 1876 was followed by the enactment of the Native Jurisdiction Ordinance of 1878, which provided a legal basis for the extension of control; this was replaced by an Ordinance of 1883, which, with certain amendments in 1910 and 1924,² remained the basis of native administration in the Gold Coast Colony until 1927.

The ordinance gave authority to chiefs to issue by-laws on a defined list of subjects, including such matters as the maintenance

¹ Sir W. B. Griffith, *op. cit.*, p. 17; cf. Chap. V, p. 133.

² *Laws*, cap. 113.

of communications and the care of unoccupied lands. On the judicial side the ordinance recognized the jurisdiction of native tribunals, composed of the chiefs and their councillors as authorized by native law. These tribunals, besides dealing with breaches of by-laws made under the ordinance, also had jurisdiction over minor civil causes and in all cases relating to land held under native tenure, with powers to punish minor offences, including disobedience to the orders of a chief. In form, therefore, the ordinance resembled those which were at a later date passed to regulate native administration in areas under systems of indirect rule; that it produced other results is due to the different conception held in the Gold Coast of the position of the chiefs in relation to the administration. The ordinance made no provision for the appointment of chiefs by government, nor for any procedure for declaring which chiefs should be entitled to exercise jurisdiction; it appeared, therefore, to recognize that the right of jurisdiction was inherent in the chief, though the extent of its exercise might be subject to regulation. In practice this led to the establishment of tribunals in the smallest villages, which the administration was unable to close. Again, though provision was made for an appeal to administrative officers, the latter had not those powers of supervision and revision which, as experience has shown, form the real guarantee of the efficient working of native tribunals. Fines were appropriated by the court, and the course of justice was further prejudiced by the peculiar local custom, connected with the Omanhene stool, known as the chief's 'oath'. This 'oath' was usually the name of a place where some disaster had occurred, and the swearing of it by a person found to be in the wrong involved the payment of a fine to the occupant of the stool to which the oath was attached.

The provision made for the enactment of by-laws by chiefs, which at a later date proved in other areas to be a useful measure of local self-government, largely failed of effect in the Gold Coast, owing to the lack of means for compelling native authorities to enforce the operation of the by-laws. A typical case arose in regard to the by-laws passed, at the instance of the administration, for dealing with pests affecting cocoa; the by-laws were entirely inoperative, and the government was compelled to pass its own

Pests Ordinance,¹ and to appoint inspectors to see it carried out.

The position of the Gold Coast chief was, and still is, unusual. The office is elective from the stool family, and an unpopular chief is liable to 'destoolment' by the persons who elected him. Under British administration the practice became common; between 1904 and 1926 there were no less than 109 destoolments, and at an earlier stage a chief who interested himself in the enforcement of an unpopular measure usually found himself destooled. Though the procedure in connexion with destoolments has been regularized and to some extent controlled by subsequent legislation,² destoolments remain frequent. The stools or native administrations finance themselves by the proceeds of court fines, of market fees, and of the rent or sale of stool lands, or by raising occasional levies which are voluntary only in the sense that they are not supported by any law. Since these funds are not supplemented by any contribution from government taxation, they are not unnaturally regarded as available mainly for expenditure on stool purposes, including the personal needs of the chief and his councillors; their expenditure is not controlled by the administration, and large sums are wasted on litigation regarding stool lands.³ Some stools are heavily in debt; the native administration is in effect mainly an agency for the maintenance of the stool government; it is not used, or indeed capable of being used, as an agency for effecting improvements in local conditions. The responsibility for such improvements is discharged directly by government.

The deficiencies of the ordinance were obvious; but the government was at the outset concerned to effect an improvement in its judicial rather than its administrative working. Between 1894 and 1922 no less than five Bills were drafted, with a view to securing better control over the judicial system. For the most part attention was directed to providing that jurisdiction should be confined to such chiefs as were confirmed in their judicial capacity by government; but proposals to this effect met with persistent opposition from the party which supported the interests of the chiefs in the legislative council. The discussions are of interest,

¹ Ordinance 37 of 1923.

² Native Administration Ordinance, 1927.

³ See Chap. XII, p. 857.

for it is only in the Gold Coast that this aspect of native administration can be said to have become a matter of public controversy. The chiefs claimed, partly on general grounds, and partly on the basis of the proceedings of 1844 and 1852, that their rights were inherent and not derivative; government was accordingly not competent to withdraw or even to vary their jurisdiction. The Order in Council of 1901, which annexed the Gold Coast territories, clearly constituted the Crown as the only source of legal authority; nor did the proceedings of 1844 and 1852 afford the chiefs either legal or moral ground for claiming that the Crown was bound to allow them the exercise of an independent form of jurisdiction. At the same time their case appeared to receive some support from the fact that the government had never taken steps to define the constitutional position of the chieftdom. The Ordinance of 1883 gave the Governor authority to suspend or depose a chief who appeared to have abused his power, and the Chiefs' Ordinance of 1904 allowed him to 'confirm' election and installation. This latter provision, however, was intended to render a chief's authority unassailable at law; neither in this ordinance, nor in any other law, had the Crown taken the position which it assumed in Nigeria or Tanganyika, that the chief can exercise no legal powers until formally recognized as native authority. All the five Bills were eventually abandoned, though this result was perhaps due less to the opposition of the chiefs' party than to the inability of the administration itself to arrive at an agreed decision on the question of principle involved.

It is legitimate to ask why the government did not feel itself able to adopt a system of native administration similar to that which was introduced in Nigeria in 1916. The Gold Coast system was designed to show the greatest possible respect to the position of the chief as representative of the stool; but this policy in itself forbade the application of that measure of control which made it possible to treat native institutions elsewhere as effective agencies of self-government. Just because it was sought to respect as far as possible the powers which custom gave to the chief, his authority was necessarily restricted to that field; and in the wide range of matters outside the sphere of stool interests, administration inevitably tended to take a direct form. A further

consequence ensued. The mismanagement by the chiefs of stool affairs, more especially in respect of the disposal of stool lands,¹ and the extension of a system of direct rule in other matters, tended to reduce the reputation and the authority of the chiefs; and as early as 1901 the Governor reported that they had so little control over their people as to make it doubtful whether the system of indirect rule could be extended to the Gold Coast. Policy tended rather to the grant to the chiefs of a political position as members of the legislative council than to the use of the stools as part of the administrative machinery of government.

The situation was one which gave the Gold Coast the benefit neither of a direct nor an indirect system of administration; and in its inability to find a solution the government accepted in 1927 a Bill put forward by a number of the chiefs, and embodied it in the Native Administration Ordinance of that year. The ordinance made some advance in recognizing as part of the hierarchy of administration not only the chiefs,² but their councils; the paramount chiefs' tribunals received appellate powers and their original powers in civil cases were enhanced. But the most important provision of the ordinance lay in the recognition of the Provincial Council, consisting of the head chiefs of each of the three provinces, as the tribunals for the trial of issues arising between paramount chiefs, divisional chiefs, and chiefs of the province. The measure did not, however, provide any solution for the indeterminate position which existed as regards native administration. On the judicial side, it did not give the Governor power to vary the schedule of chiefs empowered to hold tribunals, except to include a chief who had proved his claim to be included, nor did it categorically lay down that the power to exercise jurisdiction depended on recognition of the chief by government, or provide for administrative supervision and control over tribunals. On the executive side it made no provision for the introduction of the native treasury system which, as experience has shown, is the most essential feature in indirect rule. The chiefs still depend for their income largely on fines from the native courts and revenue from stool lands. Irregular methods of raising money are

¹ See Chap. XII, p. 776.

² L. P. Mair, *op. cit.*, 1936, p. 165.

resorted to, and dependence on income derived in such ways undermines the position of the chief.¹ The question of the native treasury has for many years been one of the most controversial problems in Gold Coast politics. In 1931 an ordinance was passed² which merely conferred power on a paramount chief to make by-laws establishing treasuries; such by-laws have been passed in very few states. It did not involve any measure of control and would not have established a native treasury system in the sense that is understood elsewhere.³ In the absence of a complete measure of control, there was no guarantee that any part of the stool funds would be spent on public purposes; and in the absence of a direct tax, or any contribution from the state, many of the stools had inadequate resources for financing measures of local improvement. In 1932 the government proposed, in its draft Native Administration Revenue Ordinance, to impose a direct tax in order to augment the funds of the native administration; but the opposition which the Gold Coast has always shown to any measure of direct taxation⁴ was intensified when it was announced that part of the proceeds of the tax would go to the revenue of the central government. Two years later it was decided that if the tax were imposed, no part would be taken by government;⁵ but the opposition continued, and the proposed ordinance was withdrawn. The chiefs have consistently claimed that the native administration treasuries should be financed by grants from the central revenues;⁶ they contend that the export duty on cocoa is a tax in which the native administrations are entitled to share. By an amendment of the Native Administration Ordinance⁷ passed in the legislative council in March 1936 paramount chiefs are, in effect, empowered to impose tribute or levies on their people. The representatives of the provincial councils spoke in favour of the amending Bill during the debate, but some of them were careful to explain that it would not be necessary to apply it, when enacted, to their states, while the others afterwards repudiated all responsi-

¹ *Report*, op. cit., Cmd. 2744, 1926, p. 136.

² Native Administration Amendment Ordinance, 1931.

³ Cf. above, pp. 428 and 436-7.

⁴ See Chap. X, p. 585.

⁵ *Address by the Governor at the Opening of the First Session of the Legislative Council*, 1934, p. 9.

⁶ *Papers relating to the Petition of the Delegation from the Gold Coast Colony and Ashanti*, 1934, pp. 38-9.

⁷ No. 25 of 1936.

bility for the measure. So far no paramount chief has approached government for permission to impose a levy on his people and it seems very unlikely that any will do so. A certain number of native treasuries have been voluntarily constituted by chiefs, and in one case a treasury has been imposed on a spendthrift division by ordinance;¹ but in no instance is there a real treasury in the sense that the whole of the revenue is brought to account and expenditure is governed by approved estimates. It may be noted that on the judicial side Ordinance 18 of 1935 made a material improvement by the grant to administrative officers of authority to supervise native courts, and a restricted authority to review their judgements.

Ashanti is administered apart from the colony by a Chief Commissioner responsible to the Governor of the Gold Coast, and like the Northern Territories the administration forms a significant contrast with the colony, reflecting the periods when its administration was developed. In Ashanti the tradition of respect for native authority has not been unbroken. The powerful confederation under the Asantehene, the title of the head of the Ashanti nation, was dissolved in 1896 after the Ashanti wars, when the territory became a British Protectorate. In 1901 Ashanti was annexed to the Crown and a conscious process of disruption followed; the independent chiefs created during that period were not all men of hereditary position in the tribe. Investigation since 1932 regarding the wishes of the people showed that the great majority were in favour of the restoration of the confederacy, and on January 31, 1935, the restoration was proclaimed under the Asantehene. The tribal organization is more clearly developed than that of the colony, the educated element is smaller, and political influences are not so great; legislation does not require the consent of the legislative council. Thus it was possible in 1924 to provide a Native Jurisdiction Ordinance on the lines followed later in the Colony in 1927 and 1931, and a number of stool treasuries were then constituted.

The restoration of the confederacy involved modifications in the previous system, and for this purpose a new Native Authority Ordinance and Native Courts Ordinance were introduced in 1935.² These ordinances were a step forward in the development

¹ Asamangkes Division Regulation Ordinance 3 of 1935.

² Ordinances 1 and 2 of 1935.

of a system on Nigerian lines, quite apart from the need that had arisen through the restoration. It was thus arranged that the Asantehene presides over a native court of first instance, having jurisdiction over the Kumasi Division only, and a court of appeal consisting of the head chiefs of divisions and clans. The latter court, while it is primarily a court of appeal in land cases from the head chiefs' courts, has also original jurisdiction in land cases arising between chiefs of different divisions. Appeals from head chiefs' courts in suits other than land cases lie to the magistrates' courts. The executive powers of the Asantehene are bound by traditional custom, which requires him to respect the right of independent members of the confederacy; he may form a native treasury, but his powers over natives outside his own division may, except in special cases, only be exercised through the head chief of that division. A Confederacy Council, composed of the head chiefs of the constituted divisions and chiefs of the Kumasi clans was established by the Ashanti Confederacy Council Order of 1935. It is the Supreme Native Authority within the confederacy area and has power to issue orders for specific purposes and to make rules subject to the approval of the Governor. The Asantehene is assisted, in his capacity of head chief of the Kumasi Division, by the Kumasi Council of Chiefs. As these chiefs stay in Kumasi and meet frequently they tend to acquire an undue influence in Ashanti affairs, and to exercise a somewhat arbitrary rule over the areas of hereditary land and the many personal subjects restored to them. The efforts of the administration are directed towards making the divisional and village councils representative of the views of the people and thus strengthening the position of the divisional chiefs as the people's representatives in the confederacy council.

The divisional chiefs have courts more or less according to their importance. District Officers exercise supervision of the courts and can remove cases to their own courts. In particular the handling of cases in which a political flavour is present leaves much to be desired; in other cases the most usual errors are in procedure, a difficulty which is bound to arise where courts from which there is appeal to European courts are required, as in this case, to administer a part of the criminal code; members of

the native court find difficulty in understanding the acquittal on appeal on technical grounds of persons who have unquestionably committed the offences for which they have been convicted. The organization of the political and judicial side is in a more complete state than that of the administrative, and, as in the Colony, it is improbable that much progress can be made in the development of the executive functions of the native authorities until a system is evolved whereby an adequate and regular income can be assured. There is no direct taxation other than by the imposition of levies at the request of the chiefs and elders, and no machinery exists to enforce payment of levies by defaulters. Moreover, levies are rarely applied except for the liquidation of the debts which weigh heavily on most of the stools. The stool revenues are barely sufficient to meet recurrent expenditure; a few stools have received considerable amounts in payments for mining rights or in presents from strangers for the privilege of cultivating stool land, but such revenue, not being recurrent, only helps temporarily to ease the financial situation. Some measure of progress has, however, been effected. The treasuries are obliged to keep banking accounts where a bank exists, and almost all treasuries have accounts at the bank at Kumasi from which withdrawals are impossible without the countersignature of the District Commissioner. The increase of stool debts is kept in check by a native authority treasury rule which requires the consent of the District Commissioner before debts may be contracted. Public audits of stool accounts are held twice yearly under the supervision of District Commissioners. These audits, previously regarded with disfavour by chiefs, since inquiry by the young men was often a preliminary to destoolment, are now welcomed as a safeguard against discontent, and are considered to be of use in removing ignorance of the objects of stool expenditure. It is, however, still the case that suggestions for contributions by way of a levy to a treasury which can show a credit balance are not welcomed by a people who have only been accustomed to contribute in times of crisis or to reduce excessive debts.

Destooling also prevails in Ashanti, but is on the decrease. The Native Authority Ordinance of 1935¹ provides that a chief cannot

¹ No. 1 of 1935.

operate as a native authority until gazetted, but in practice it would be difficult to maintain a 'destooled' chief.

The Northern Territories of the Gold Coast are also administered by a Chief Commissioner under the Governor of the Gold Coast. The administration dates from the proclamation of a protectorate in 1901. The tribal organization in these territories has points of special interest in view of the recent development of a system of indirect rule. The ruling classes in Mamprusi, Dagomba, Gonja, and Wala are not of the same origin as the people: they possessed well-developed ideas of chieftainship and established themselves more by reason of superior intelligence than by force of arms. They did not interfere with the priestly hierarchy, but accorded it a place in the system of government. The previous type of government was patriarchal; legal sanctions were unknown; but the priests controlled the people by threats of punishment to be inflicted supernaturally on offenders. Section 15 of the Administration Ordinance of 1902 illustrates the attitude towards the native authorities which prevailed until 1928. Under this section the chiefs were merely empowered 'to exercise the jurisdiction heretofore exercised by them in the same measure as such jurisdiction has heretofore been exercised'. No steps were taken to define more exactly the extent of this jurisdiction or to give recognition to native tribunals. The chiefs or heads of families continued to settle disputes by arbitration, but a process of tribal disintegration followed, and even those chiefs who had a long tradition of rule found difficulty in maintaining authority. The cohesion of tribes was further weakened by the partition of the territories into districts without regard to tribal boundaries, and by the arbitrary division of tribes by the Anglo-German boundary.

In 1929 suggestions were made for vesting the native tribunals with strictly limited criminal jurisdiction, and a study of the history, constitution, and customs of the people by the district officers provided evidence that the establishment of a system of native administration in certain, if not all, of the divisions would prove less difficult than had been imagined. In conferences attended by chiefs and people, chiefs who had enjoyed independence for over thirty years acknowledged the paramountcy of

their former head chiefs and consented to resume their subordinate positions. District boundaries were modified, and in 1932 were enacted Native Authority, Native Tribunals, and Native Treasuries Ordinances, embodying the principles and following, in a simplified form, the lines of the corresponding legislation in force in Nigeria and Tanganyika. The Native Tribunals Ordinance was repealed by the more comprehensive Native Courts Ordinance of 1935, which provides for the establishment by the Governor of three grades of native courts. A grade A court, which is generally also the native court of appeal, has jurisdiction to hear land disputes and civil suits up to £50, while in criminal actions it may impose a fine of £50 or a sentence of imprisonment not exceeding six months. The jurisdiction of grade B and grade C courts is respectively £25 and £10 in civil suits, and in criminal cases fines of £25 and £5 or sentences of imprisonment not exceeding three months and one month. In 1936 an important step was taken. This was the introduction of direct taxation in the twelve native authority areas into which the Northern Territories and the part of Togoland which falls under the same administration are divided. The ease with which it was introduced is a tribute to the manner in which the reorganization above referred to was carried out. The tax, the proceeds of which are paid wholly and directly into the native treasuries, is, in principle, the commutation of the customary tribute, in labour and in kind, which the people paid to their chief,¹ but its incidence varies in different areas, and in different parts of the same area according to the assessed annual income of an average adult male. As a result principally of the introduction of direct taxation, and to a lesser extent of the more systematic collection of market and other fees, the revenue of the various native administrations increased from £860 in 1933 to nearly £40,000 in 1937. Having funds at their disposal, the native authorities are now in a position to carry out, and are carrying out, some of the functions of local government.

XV. TOGOLAND

For administrative purposes Togoland under British mandate is divided into two sections, the northern being treated as a part of

¹ See Chap. X, p. 586.

the Northern Territories and the southern as a part of the Eastern Province of the Gold' Coast Colony. The German government recognized chiefs in so far as they could be utilized by the government, and allowed them tribunals with limited jurisdiction, head chiefs in civil and criminal cases up to £5 and sub-chiefs up to £2 10s. These powers were at first maintained by the mandatory power, and, as a preliminary to the introduction of a system more in accordance with the modern ideas of indirect rule, investigations into tribal organization and law and a voluntary amalgamation of groups of independent divisions took place. The difference in the systems of administration in the northern and southern sections is reflected in the ordinances defining the powers of the chiefs and their councils. In the northern section the Native Authority, Native Courts, and Native Treasuries Ordinances of the Northern Territories apply, and there more emphasis is laid on the executive authority and responsibility of the chiefs than on their judicial powers. Chiefs are chosen from the members of certain families and selected by the elders if there be more than one candidate; but it is only on appointment by the Governor that they become native authorities and preside over their native courts. As their selection is recognized by the Governor, they enjoy a greater security in tenure of office than tribal custom might otherwise have allowed. In other parts of the north there are native tribunals, and native courts of appeal, with appeal to the District Officer, save in land cases, which go to the Council. Offences against Health Ordinances in the northern section are now tried by native authorities.¹ Direct taxation has been introduced and native treasuries established. Chiefs have been given considerable responsibility in framing their budgets, and take an increasing interest in the provision and maintenance of such social services as education and sanitation. It may be said that in the northern section, where native society has remained comparatively primitive and tribal influences are still strong, and where also conditions approximate to those in the adjoining territories of the Gold Coast, native administrations are being developed with some measure of success.

¹ *Report on the Administration of Togoland under British Mandate for the year 1936*, p. 36, para. 112.

In the southern section the general policy of amalgamating groups to form native states did not represent the restoration of any earlier system of native rule such as existed amongst the majority of Gold Coast tribes; the peoples have no bond of unity apart from their common origin, language, and customs, and groups only united for purposes of defence; under German rule combinations of political groups had been discouraged and disintegration became complete. In 1931 the mandatory power decided to encourage the independent divisions, of which there were no fewer than sixty-nine, to amalgamate and form states of a size and population which would allow of the establishment of local government on a proper basis; and to this end those who joined one or other of the amalgamations were granted authority to hold tribunals with limited rights, a privilege which does not exist in non-amalgamated areas where all cases still go to the District Officer.¹ For this purpose a special Native Administration Ordinance was enacted in 1932 for application only to the southern section. In its general form it resembles the Native Administration Ordinance of the Gold Coast Colony, but with an important difference; it recognizes the principle that the right of jurisdiction flows from the Crown and is not inherent in the chiefs by virtue of their election by the people. Progress towards an organized system of native administration encounters the difficulties which have been described in dealing with the southern areas of the Gold Coast Colony, but the government hopes that the advantages accruing to the peoples of the native states which already have tribunals and treasuries will become apparent. In divisions where soil is suitable for the cultivation of cocoa, and the inhabitants are as a rule well off, authority to exercise jurisdiction is sought after as a means of increasing the importance of the chief and his elders and as a source of revenue. In less favoured districts the inducement to amalgamate is less, and, in the absence of native tribunals, the District Commissioner continues to hear land disputes and deals with the more important legal matters, while small disputes are settled by arbitration. At present only two out of the four states have treasuries and have accepted the principle of levies for specific objects; and in one

¹ *Ibid.*, p. 4, para. 16.

of those (Awatime) little progress has taken place, as the collection of a voluntary levy has not been found possible.

XVI. SIERRA LEONE

The development of native administration in Sierra Leone and the Gambia has certain similarities with the Gold Coast, though the disturbing influence of frequent destooling is absent. Native rulers were at first confirmed in their traditional relationship with their own subjects in a manner that permitted of little effective intervention by the government in their internal affairs, while the absence of native treasuries and the dependence of chiefs on the administration led to stagnation and lack of initiative on their part.

The Colony of Sierra Leone was acquired by the British government by purchase or concession under treaties with the chiefs at various dates from 1807 to 1872; the Protectorate, an area of 26,000 square miles forming the hinterland of the colony, was formed in 1896. With the exception of the urban areas of Freetown and two neighbouring districts, the social organization of the Colony and the Protectorate is the same, the country being divided into chiefdoms owned and administered by their respective tribal authorities. Chiefdom areas vary in size from that of Tambakha Yobanji, 500 square miles in extent, in the Karene District, to that of the Yabai Krim in the Pujehun District, of about twenty square miles. Each chief is independent and equal in status, and any one of them may be called upon to act as an assessor in the settlement of any dispute which the tribal authorities may find themselves unable to settle unaided. The tribal authority is the sole owner of the land within its area, a principle of native custom uniform throughout the territory and embodied in the Protectorate Native Law Ordinance of 1907.¹ The attempted enforcement of the tax imposed under the Protectorate Ordinance of 1896 gave rise to a rebellion in 1898.² Sir David Chalmers in his report on the insurrection considered whether it was desirable that the power of the chiefs should be broken or retained, and concluded that the only practical policy was 'a regulated administration through the chiefs'. Apparently as a result of this report, ordinances were enacted which formed the basis of

¹ See Chap. XII, p. 780.

² See Chap. X, p. 587.

the system of administration existing up to a recent date. These ordinances, the Protectorate Ordinance of 1901, the Protectorate Courts Jurisdiction Ordinance of 1903, the Protectorate Native Law Ordinance of 1905, and finally a consolidating Ordinance of 1933,¹ recognized the authority of the chiefs and defined the jurisdiction of the native tribunals. Their claims to personal services and rights to compel labour for communal purposes were defined by legislation in 1932.²

The chiefs are usually the oldest suitable male members of 'crowning' houses, but occasionally a successful business man contrives to be elected. The chief presides over a tribal authority consisting of his principal men and of section chiefs, who have their own councils; he also presides over the native tribunal. The tribunals have powers to deal according to customary law with all matters which have not been withdrawn from their jurisdiction. Their jurisdiction in civil cases is undefined (with the exception of cases dealing with trading debts), but powers in criminal matters, while allowing fines to an unlimited amount, are restricted to imprisonment up to six months, and sentences of more than fourteen days are referred to the administrative officer. Corporal punishment, rarely used, is an undefined power; appeals against sentences of £2 or £3 are frequent, and reference to the administration and supervision makes the courts timid in applying their powers. Again, courts tend to enforce customs of doubtful value, such as ritual offences or debts incurred by long-deceased relatives of the parties, and also admit the practice of 'begging', whereby an offender may be allowed a reduction of a heavy fine if suitable apologies are made to the chief. Under the present system the tribal authority or assembly, provided for in the Ordinance of 1905, rarely meets in full; chiefs are reluctant to summon it owing to lack of financial resources, distance, and bad communications. The system clearly lacks vitality as a potential organ of local self-government, and the government hopes to improve it by remodelling the authorities and courts on lines more in accord with the accepted principles of indirect rule. A report on the possibilities of such a development³ has been pre-

¹ Protectorates Ordinance, 1933.

² See Chap. XI, pp. 610 and 620.

³ *Sessional Paper* 3 of 1935, pp. 13-15.

pared; it recommends the establishment of native treasuries (into which fines and fees will be paid instead of into the pockets of the chiefs as at present) and more frequent meetings of the tribal authority and consultation by the government. Ordinances bringing these recommendations into effect have now been passed.¹ Only one type of court is considered necessary, with appeal to the District Commissioner; the village headmen's courts are to be continued as courts of arbitration. Revenue for the authorities' treasury will come from a tax of 3s. or 4s. on houses (in lieu of the present system of tribute whereby the chief receives a proportion of the tax) with an additional grant by government of about 2s. a house; from court fees and fines, and from a rebate on the house tax; other sources of revenue will be forestry and land dues, which at present are negligible. A provision of £6,365 was voted by the legislative council in 1938 to enable the reorganization of fifteen chiefdoms in both provinces to be carried out.

XVII. THE GAMBIA

Since before the British occupation, a process of tribal disintegration has been in progress throughout the Gambia owing to slavery, inter-tribal warfare, and migrations; little tribal organization now remains. Administrative districts have been constituted arbitrarily, and the international boundary makes an artificial dividing line between people of the same tribes. The selection of chiefs has not been governed by any old-established rules of heredity, but consideration is paid to the views of the people, and recent policy has been to appoint where possible members of the old kingly families and to amalgamate divisions of tribes to form more satisfactory units for native administration. In 1894 an Ordinance, no. 11, provided for the exercise of jurisdiction by native authorities and by commissioners; and, subject to a repugnancy clause, laid down that native laws and customs in force had the same effect as regulations made under the ordinance. The duties and powers of the native authorities were left vague; and chiefs were, in effect, made agents of the government to suppress disorder, execute laws of the government, and apprehend offenders. The original ordinance was superseded

¹ Ordinances 8, 9, 10, and 11 of 1937.

by an Ordinance of 1913 and this in its turn by Ordinances of 1933.¹ In 1935 these ordinances were consolidated in a triple series of measures,² under which the head chiefs continue to be native authorities, are given power to issue administrative orders, and have duties in connexion with suppression of crime. The native courts are graded A and B, to administer both Native and Mohammedan law; the A courts have jurisdiction up to nine months' imprisonment and civil claims of £50, the B courts up to six months' or in claims of £25. There is no Native Appeal Court, but appeal is to the Commissioner and then to the Supreme Court. Rules of the authorities extend to such matters as the growing of economic crops. Chiefs are appointed for probationary periods and are then confirmed if satisfactory.

Besides their duties as heads of the tribunals, chiefs are responsible for the census on which the yard tax is assessed, and for collection of the 'strange farmers' tax of 8s. a head; infringements of the tax law³ are punishable in the native courts. The chiefs are paid stipends by government, and receive a commission on tax collections amounting to 5 per cent. of the yard tax and 25 per cent. of the strange farmers' tax. The village headmen who collect the tax in the first instance on the chiefs' behalf receive the commission but no stipends. The chiefs' stipends do not exceed £50 a year, but total incomes of the more important chiefs average about £200 a year. There are no native authorities' treasuries; court fees and other fees are paid into a 'Development and Emergency Fund' controlled by the Administrative Officer who consults chiefs about expenditure. The chiefs have no councils. The ordinances of 1935 made some advance towards a more effective system of native administration, but progress is impeded by the lack of chiefs capable of exercising authority and the virtual absence of tribal cohesion.

In the Gambia, Moslems are increasing in numbers, especially among the Jola tribe; their cases are settled under Moslem law in the ordinary native courts, except in Bathurst, where a special court has been established.⁴

¹ Protectorate Ordinance, 1913, Native Authority and Native Tribunals Ordinances, 1933.

² Protectorate Ordinance 2, Native Tribunals Amendment Ordinance 3, Provincial Courts Ordinance 5.

³ Ordinance 2 of 1935.

⁴ Mohammedan Law Recognition Ordinance, *Laws*, cap. 20.

XVIII. THE FRENCH TERRITORIES

Reference has been made elsewhere¹ to the operation of that policy of 'assimilation' which, at one stage, was the guiding principle of French colonial policy, and gave to West Africa the four *communes de plein exercice* and the *Conseil Général* of Senegal. In dealing, therefore, with the French policy of native administration it is possible to neglect the small element of *indigènes citoyens*, created through the operation of this policy, and to confine the study to the system applied to the native *sujets* who make up the great bulk of the population. It is usual to speak of the principle which now regulates the relation of the administration to its African subjects as one of 'association'. It is a policy which, for the time being at all events, concentrates attention on the formation of an *élite* to occupy an intermediate position between the native living in customary conditions and the fully assimilated French citizen. The *élite* are not to be viewed only as 'auxiliaries' in the work of administration; they assist also in introducing to Africa that measure of French civilization which can be regarded as suited to African conditions. It is clear that, with such an objective, native institutions are necessarily viewed in a different light from that in which they are seen in the philosophy of indirect rule. It would not be possible for French opinion to subscribe to the view that it is vital 'to direct the energies of the native to the preservation of his own institutions' on the ground that 'we must graft our higher civilization upon the soundly rooted native stock'.² Modern French colonial policy does not condemn these institutions as worthless; it argues that they will repay careful study;³ but the value they possess is to be measured only by reference to the contribution they can make in the process of adapting native society to French ideas and civilization.

French policy has appreciated the need for keeping touch with African opinion, and a detailed account has already been given⁴ of the provision for the representation of Africans in the *conseil de gouvernement* of French West Africa, in the *conseils d'administration* which exist in each of the colonies of French West Africa (except

¹ See Chap. VI, pp. 185 ff.

² See above, p. 432.

³ See Chap. II, p. 44.

⁴ See Chap. VI, pp. 200-2.

Senegal) and in French Equatorial Africa, and in the various local councils, chambers of commerce, and advisory bodies. But it will be clear from the description given that advisory councils of this type are designed to reflect the opinion of the *élite* rather than of the general population; it is, indeed, only of recent years that efforts have been made¹ to constitute village and *canton* councils which will provide the non-educated classes with some means of expressing themselves. It is perhaps true to say that, as a rule, the non-educated African, even if a chief, finds direct access to the administration more difficult than would be the case in most British territories.

An account is also given elsewhere² of the legal system of the French colonies, which makes a clear distinction between *justice française* and *justice indigène*. It is necessary here to recall only two features of that system. The native tribunal is not 'native' in the sense understood elsewhere; it is not the court established by native custom, and the chief and his council have no recognized place in it. Secondly, the procedure of these courts is such as inevitably to bring an increasing pressure to bear on native customary law to conform to French legal conceptions. An account will also be found, in the chapter relating to land, of the French attitude in regard to the African systems of land tenure, and the attempt made to bring them more into conformity with French conceptions of the law of property by introducing some type of individual proprietary right.³ In the chapter on education reference is made to the manner in which educational policy serves the dominant theory of 'association', particularly in regard to the training given to the class which has been described as the *élite*.⁴

In occupying French West and Equatorial Africa the French made treaties with native states and chiefs, recognizing existing native institutions, and in the first stage native administration was to a great extent confined to carrying out these obligations. But the grant of protection, without at the same time making provision for effective regulation, had the usual result; the chiefs were able to abuse their position, and in many cases their rule was in

¹ See below, p. 489.

³ See Chap. XII, pp. 858-62.

² See Chap. VII, pp. 275-7.

⁴ See Chap. XVIII, pp. 1261-70.

effect one of terrorism. Both humanitarian and economic considerations suggested an extension of government control. Confronted with the necessity of either controlling the native kingdoms or substituting a direct form of administration, the French chose the latter alternative. Gradually the provisions of the treaties were put aside and the powers of the chiefs curtailed. The regroupment of native areas and establishment of petty chiefs as agents of the administration and representatives of their people has been, and is still being, carried out throughout all the territories. The government has declined to appoint successors to emirs or superior chiefs on the death of holders of the titles or on their removal for abuses; in Senegal, the Sudan, and Dahomey even the names of old chiefdoms have disappeared; elsewhere and in the mandated territory of the Cameroons the Moslem emirs have been reduced to the status of presidents of a confederation of chiefs (*chefs de cantons*) and their pagan subjects freed from interference.¹ This reorganization was based mainly on ethnical considerations, but economic and even military needs played their part. Thus the emirate of Sine was abolished in 1924 at the death of an emir who, with his people, had been loyal to the French administration; it was held that in the interest of the economic development of the country the inhabitants should not be allowed to follow a separate tradition. Between 1908 and 1912 reorganization took place in the Ivory Coast for military reasons and further reorganization in 1913 for economic reasons; indeed, considerations of economic development must of necessity play an important part in the evolution of a native policy based on a *mise en valeur d'ensemble* in which political, social, and economic development are closely allied.²

The position accorded to native chiefs of the reorganized groups is a compromise between the ideal of a complete assimilation of colonial to home methods of administration and the practical necessity of supplementing a small European staff by the employment of native personnel. The chiefs are, to quote the phrase used in the Cameroons report of 1922, 'executive agents'. The first tendency was for these agents to be chosen purely with regard to

¹ H. Labouret, *Le Cameroun*, 1937, p. 18.

² A. Sarraut, *La mise en valeur des colonies françaises*, 1923, p. 83.

their usefulness to the administration, and in some areas a knowledge of French was a condition of appointment. Office clerks, interpreters, and ex-soldiers were, in many cases, appointed chiefs. As early as 1909, however, misgivings as to the wisdom of this policy were expressed in a circular by the Governor-General of French West Africa, M. W. Ponty. This circular¹ pointed out that the grouping of natives on a purely territorial basis, under a native agent appointed by government, had often resulted in placing the traditional chiefs at the mercy of an individual of alien religion and race, and as a remedy it advocated the use of tribal chiefs. In 1917 the Governor-General, M. Van Vollenhoven, went a step further in declaring that the appointment of traditional native chiefs was indispensable wherever possible as intermediaries between the *Commandant du cercle* and the people, in place of the interpreters, secretaries, or native police who at that time represented French authority. He emphasized, however, that, as there cannot be a division of sovereignty in the administrative district, French authority must remain alone; the chief can act as an agent only. Similar principles were laid down by a later Governor-General in 1921: the destruction of the native social structure is regretted, not because of any conception of its inherent value, but because it could have been improved for the purpose of serving the administration. In 1924 the Governor-General of French Equatorial Africa advocated the reconstruction of native society by the re-establishment of traditional groups. In 1928 we find this policy of selecting hereditary authorities for administrative duties embodied in an *arrêté* affecting the mandated territory of the Cameroons,² whereby new chiefs are nominated by a *mandat* of the administration only after consultation with notables and superior chiefs according to local native custom; but in doubtful cases the administration makes its own choice of the most suitable person. In Dahomey, by an *arrêté* of 1930, village chiefs are to be chosen from a list of three names after an election by the majority of members of the villages, and from these the administrative officer selects one for a period of four years which may be extended indefinitely. A model ordinance by M. Brévié in 1932 provides

¹ Circular of Sept. 22, 1909, *Journal Officiel*, 1909, p. 447.

² H. Labouret, *op. cit.*, p. 20.

simply for the election of a village chief by the majority of the heads of families.

The diversity of conditions over such a vast territory has doubtless led to wide differences in practice, but the official system remains the same. The administrative district is divided into *cantons*, each with its *chef de canton*, who is the superior over *chefs de villages*, chiefs of one or more villages. The grouping of villages into *cantons* is an essential principle of policy, though in many areas, for geographical or ethnical reasons, no suitable cantonal head can be found. In some cases the *chef de village* is the highest native authority recognized. In the Yoko subdivision of the Cameroons, for example, there are thirty village chiefs, each assisted by three or four native *capitas*, but no higher native authorities. In French Equatorial Africa there is an intermediate *chef de tribu* who may also be a *chef de canton* if his group covers a wide enough area. In exceptional cases, such as in the Lake Chad area of the Cameroons, where it has not been thought desirable entirely to suppress emirs who previously held sway over large areas, *chefs supérieurs* are recognized, but the general policy is to keep the intermediaries between the administrative officer and the people as few as possible¹ and to re-group communities within the cantonal system. In communes or urban areas *chefs de quartier* are appointed with the same position as village headmen.

The semi-official status of the chiefs is marked by the manner in which they are remunerated. The majority of village chiefs are responsible for tax collection and receive a percentage which varies at the discretion of the administration.² In some areas, as for example in Senegal, it has been the custom to rank chiefs in grades, the appointment in or promotion to a grade being announced in the *Journal Officiel*. The question of the salaries paid to chiefs has been the subject of frequent discussion in the Colonial Council.

In addition to the collection of taxes a wide range of duties is imposed on the village chiefs. In some areas they keep a register of the population under their control; in the Chad colony they also record the numbers of live stock in connexion with taxation.

¹ J. Brévié, *Circulaires sur la politique et l'administration indigènes en A.O.F.*, 1932, no. 421, p. 54.

² See Chap. X, pp. 589-92 and 599-600.

In French Equatorial Africa there is no general law defining the duties of chiefs or the relation between the different grades. In French West Africa village chiefs are responsible for the maintenance of order and the arrest of criminals, who must at once be handed over to the *chef de canton* and by him to the authorities. Their duties include the prevention of bush fires and of damage by stray animals. They are expected to organize measures to meet crises such as floods or locust invasions, to see to the maintenance of seed-farms and the storage of food reserves. They are also responsible for the upkeep of roads in their areas. They must notify infectious diseases to the canton chief and isolate the cases.

The canton chief is responsible for passing on government orders to the village chiefs under him, and for seeing that they are carried out. He keeps the register of taxpayers, and he, and not the village chief, is the agent of government as regards military conscription. He allots the proportion of taxes or *prestation* labour¹ required of the canton between the constituent villages. He forms a central source of information to government on the matters on which village chiefs are required to report. These chiefs receive fixed salaries, since they are not responsible for tax collection.

The model *arrêté* circulated by M. Brévié² in West Africa introduces the innovation that each chief is to be assisted by an advisory council. The village council is to be constituted in accordance with local custom, but should in principle consist of all heads of families. Its proceedings are subject to the supervision of the canton chief. The canton council is also to be constituted according to native custom, but should in principle include all village chiefs; this provision presupposes a degree of political unity which, as has been mentioned, often does not exist in the cantons as they have been constituted. The provincial chiefs have a council which is either a customary body or consists of all canton chiefs. This proposal, which is described at length in M. Brévié's circular,³ is an attempt to organize a means for the consultation of native opinion. Officials are urged to take an interest in the councils and to make it plain that they do not regard the chief as the only representative

¹ See Chap. XI, pp. 624-6.

² *Arrêté type* (Annexe à la circulaire générale, no. 421 du 28 septembre 1932).

³ J. Brévié, op. cit., pp. 53 ff.

of the general view. The village councils might, with the support of the administration, help to provide some form of popular control over the incidence of obligations, fiscal or other, but they do not in their present form provide a basis for the development of local government. They are given no rule-making power, and, more important, they have no revenues. It appears also that such councils have not become part of the system throughout the whole of the French possessions. In the Cameroons the law makes provision for *conseils de village* whose function is to assist the village chief by giving advice regarding public works and agricultural matters, but does not provide for cantonal councils.¹ A similar system of chiefs and councils was instituted in French Togo.² The more formally constituted local councils have been described in an earlier chapter.³

The French do not publish reports of administrative officers of the type of those which, in British territory, provide valuable information, and frequently also outspoken opinions, about the course of native administration. It is clear that, apart from any question of principle, the French system confers very considerable powers on its *agents*. The abuses committed by chiefs under the earlier system constituted one of the reasons for replacing it by a system of direct administration; that chiefs do not now enjoy so wide a range of licence is patent, but it is not easy to decide the extent to which the supervision now exercised by administrative officers establishes an effective control, or how far a more careful choice of chiefs has resulted in a greater sense of responsibility than existed among the older class of nominees. It is obvious that the quality of supervision varies widely; it is, for instance, far higher in the Cameroons than in most areas of Equatorial Africa, while in many parts of West Africa it is reinforced by the growing intelligence and consciousness of natives themselves. If, however, the British system of indirect rule meets with criticism from some French observers, the British colonial officer is apt on his part to suggest that his French colleagues are so far dependent on the work done by their *agents*, particularly in relation to the programme of increased production, that they cannot afford to be unduly critical

¹ *Arrêté* of Oct. 9, 1935.

² See Chap. VI, pp. 194-206.

³ *Arrêté* of May 6, 1936.

of the methods they employ. The system undoubtedly has great virtues in respect of simplicity of administration and unity of authority; it also appears to avoid the volume of office work which is obvious in British territories, and some of the dangers inherent in a system which grants wide powers to native authorities, for the grant of independent powers to such authorities must always carry its own risk of abuse. These points will, however, be referred to at a later stage in this chapter.¹

XIX. THE BELGIAN CONGO

The Free State employed as agents natives who were frequently alien to the tribes over which they were set; their main duty in a number of areas was in effect to supervise the delivery of rubber. But as early as 1891 the mischief of this system was in some measure realized, and instructions were given that in certain regions recognition was to be given to the traditional chiefdoms.² We are concerned here, however, with the present system of native administration, which has its roots in the reorganization made after the Free State was annexed to Belgium. A Commission of Inquiry of 1904 recommended a type of administration, later embodied in a series of decrees, which has been described as 'le régime de l'administration indirecte, si atténué qu'il soit'.³ In 1906 instructions were given that, although the chiefs to be appointed were to be chosen for their activity and their devotion to the state, their position as traditional authorities must also be taken into consideration, and no tribe should be subjected to a native authority which it does not accept.⁴ At the same time provision was made for the appointment of *messagers indigènes* who would act as intermediaries between the chiefs and the administration. In 1910 a further step was taken, and a decree promulgated which had for its aim the grouping of the native people under traditional authorities who would also be the agents of the government.⁵ The result was the recognition of a large number of petty chiefs, a number which was

¹ See below, pp. 533-5.

² *Décret du Roi-Souverain*, Oct. 6, 1891, article 1; article 6 declares: 'Les chefs indigènes exerceront leur autorité conformément aux us et coutumes.'

³ M. Halewyck de Heusch, in 'Organisation politique et administrative des colonies', *Bibliothèque coloniale internationale*, 1936, p. 37.

⁴ Decree of June 3, 1906.

⁵ Decree of Mar. 2, 1910.

unnecessarily increased by giving independent powers to chiefs who by native custom were merely the subordinates of a paramount. In 1919 the *chefferies* reached their maximum of 6,095.

From that time there has been a reaction in favour of the reduction of the native authorities to a more manageable number. An effort has been made to ascertain the real nature of native political authority, and this has led to the withdrawal of recognition from many chiefs who proved to be merely the subordinates of a paramount. A ministerial circular of 1920 also recommended the policy of grouping small native units into 'sectors' under a council representing all the native authorities in the area, one being selected from among them for appointment as chief. In the Eastern Province 302 sectors were thus created by 1924, with a resulting reduction of several hundred in the number of *chefferies*. Sector tribunals were recognized in 1926,¹ but as a political unit the sector acquired legal status only in the native administration decree of 1933.

The decree of 1933 marks an important stage in the development of the principles of native administration. Under it the customary status of chiefs is unimpaired, but they are no longer to be official intermediaries of the administration,² unless expressly recognized for that purpose. Those who held government appointments at the time the decree came into force are allowed to retain their insignia and draw their salaries subject to the approval of the *commissaire de district*. In 1934 there were 2,552 chiefs and 192 sub-chiefs. There will now be two types of native authority—the chief of a native community, whose customary powers do not depend on government, but who is entrusted by it with administrative duties on its behalf, and the sector chief, who has no customary powers over the sector, but would normally be the chief of one of its constituent communities. The Report of the Colonial Council on the decree describes the native chief as 'une autorité qui, d'une part, participe à l'administration européenne, et est intégrée dans son cadre, et, d'autre part, continue à appartenir à l'organisation indigène. Cette autorité constitue le chaînon entre les deux organisations.'³ He is also 'le mandataire qualifié de la chefferie

¹ Decree of Apr. 15, 1926. ² J. Magotte, *Les circonscriptions indigènes*, 1934, p. 20.

³ *Bulletin Officiel*, 1933, p. 951.

auprès de l'autorité européenne'.¹ M. Magotte,² in his commentary on the decree, states that in the exercise of their governmental duties 'ils agissent comme fonctionnaires et . . . sont, à ce point de vue, placés dans la même situation que toute autorité subordonnée'. The powers of the chief *qua* traditional authority and *qua* emissary of government are to be clearly distinguished. In the former case he is subject only to advice and a possible veto from the administration; in the latter it is he who issues orders to his people, but he must do so at the request of government. In matters not regulated by custom he may only issue orders on his own initiative for the protection of public health and the maintenance of order and public security, and only when such orders have not been issued by superior authority. In the *chefferies* the decree requires the consultation of native councils of notabilities (*conseils de notables*) in important matters such as finance; in the sectors such councils consist of the heads of the constituent group, the members of sector tribunals, and other notabilities chosen by the *commissaire de district*.

The system places considerable importance on the formation of the *circonscription*, the primary unit of native administration. The system of enumeration,³ indeed, has some tendency to stabilize the position of the individual as member of a *circonscription*, as has the control of native movements through the *passaport de mutation*.⁴ Natives are held responsible within their *circonscription* for village hygiene, the construction of dispensaries at the request of the medical authorities, the construction and maintenance of local roads, the building of schools or prisons, burial of the dead, and the cultivation of crops considered by government as of educational value.⁵ For these purposes every able-bodied male may be required to give up to sixty days' labour in each year. The work is not paid from funds provided by the central government, but may be paid from the local native treasury if funds are available; in the case of cultivation the produce must be sold for the benefit of the workers. A programme of all works to be carried out during the year is drawn up by the *commissaire de province* with a view to ensuring that the demands do not involve more than

¹ *Bulletin Officiel*, 1933, p. 951.

³ See Chap. IV, p. 120.

⁴ See Chap. XI, p. 671.

² *Op. cit.*, pp. 107-8.

⁵ *Ibid.*, p. 633.

sixty days' work in a year. In the absence of voluntary labour for work on main roads natives of each *circonscription* can be called on; in this case the work is paid and must not exceed sixty days.

Chiefs receive salaries from government. They are classified as 'mediocre', 'good', or 'very good', and are paid 45, 60, or 90 centimes per taxpayer in their area according to their classification. They also receive a percentage of the tax paid within their area not exceeding 3 per cent. (or 6 per cent. in the case of the more important chiefs). Where they assist in the collection they may receive up to another 3 per cent.

Native treasuries (*caisses des circonscriptions*) also received their first legal recognition in this decree. The customary revenues of chiefs, if the *commissaire de district* so directs, are paid into these treasuries. In return the chief receives a sum provided for in the budget. Their main income is derived from an addition to the poll-tax of not more than 20 per cent., the amount to be fixed for each district after consultation with the native councils. Among other resources are local levies, rents of land, market dues, and court fees and fines. Some mining and commercial companies pay a bonus as compensation for the loss the chief is supposed to incur through the absence of his people at work. The government requires the sum to be paid into the treasury, to discourage abuse in recruiting labour, but a part is eventually paid by the treasury to the chief. This practice of paying bonuses is said to be on the decrease.

The principal objects of expenditure of native treasuries are the purchase of implements, the development of organizations for production, marketing, thrift and mutual assistance, and subsidies to educational and medical work carried on by voluntary bodies. The budget is drawn up under the supervision of the *administrateur territorial*,¹ who can insist on the inclusion of items which he considers necessary, and usually keeps the accounts. Expenditure must be made in the interest of the natives living within the treasury's area, and the administration has powers to insist on expenditure which is considered necessary.

The position accorded to the two sultans of Ruanda and Urundi

¹ See Chap. VI, pp. 243-4.

resembles that of the emirs of Northern Nigeria in the early days of indirect rule. These chiefs, who exercise a quasi-feudal authority similar to that of Hima kingdoms in Uganda, were already recognized by the German administration. Their powers have not been defined in detail; they are authorized to exercise their traditional authority subject to government instructions, conveyed through the medium of the Residents who act as their advisers.¹ Policy has aimed, as in the Congo, at the grouping of subordinate authorities so as to create units of a suitable size for administrative purposes. Customary tributes are maintained, but unauthorized exactions on the part of the subordinate chiefs are punished with dismissal. Incapable subordinate authorities are also dismissed, a successor being appointed with the agreement of the Mwami (Sultan). In 1931 it was decided to remove from office the Mwami of Ruanda on account of his failure to assist in carrying out the government policy of native development; no such difficulties appear to have been encountered with his successor, or with the Mwami of Urundi.

The system above outlined is based on a philosophy which resembles that of Britain rather than that of France, and which in its turn has led to the development in the British colonies of a system of indirect rule as opposed to the more direct type of native administration preferred by the French. There is not in the present policy of the Congo any evidence of an intention to make the introduction of Belgian civilization, or Belgian institutions, the main objective of administration. But it has already been noted elsewhere that the development of much of the administrative organization of the Congo is of recent date, and this in particular applies to the system of native administration. The decree of 1933 involves a gradual change in the treatment of existing *chefferies* and their progressive grouping into sectors. There appears to have been in the past some doubt among local authorities in the Congo as to the value of this development; the sector was informally recognized before 1933 but there was some hesitation in creating these units. It has been contended that they invite conflict between the authority of the traditional chief and that of the sector chief, who, as such, is placed in a position of superiority to other

¹ M. Halewyck de Heusch, *op. cit.*, pp. 49-50.

authorities in the sector. But this feature is not without parallel in some of the British East African colonies, where the process of amalgamation often has the same result. It is perhaps too early to attempt a precise characterization of the Belgian system or to estimate its results; it is proper to say, however, that it bears every evidence of a desire to study native requirements, and, as far as possible, to respect their institutions.

XX. NATIVES IN NON-TRIBAL AREAS

(a) *The Urban Native and 'Detribalization'*

The systems of native administration which have been so far described have been devised primarily with a view to the situation of the pastoral or agricultural populations, resident on their own lands, who still form the majority in every territory. These systems, as will have been seen, have also to be adapted to meet the needs of those mixed bodies of natives who have been drawn by a variety of circumstances from their customary surroundings, but who still live under purely native conditions. Into this class fall the heterogeneous groups found in some of the coastal areas of East Africa, or, again, the population of some parts of the Victoria division of the British Cameroons, where, apart from the large collection of labourers living on the plantations, there are many strangers from the French territory and Calabar men engaged in fishing.¹ Typical again of such mixed groups are the 'stranger' residents of the Sabon Gari at Kano,² which has been brought into being by the economic development of a purely native city, or the settlements in the Belgian Congo of soldiers discharged at the end of their seven years' service in the militia. In such cases the problems which arise are due to difficulties in finding a common basis of custom on which institutions can be based.

There is another problem of native administration which is of continually increasing importance and greater complexity—that of the natives who live more or less permanently in industrial areas under European control, or in urban locations near European towns. Populations of this type have developed in a variety of

¹ *British Cameroons, Annual Report*, 1936, p. 16.

² M. Perham, *Native Administration in Nigeria*, 1937, p. 101. See below, pp. 521-2.

different circumstances. There are, in the first place, the employeess of large European enterprises, to whose conditions reference is made in the chapter relating to labour problems.¹ The degree of permanency in the composition of such groups varies with the policy of the employer, which depends partly on the distance from which the labour has to come. In the Rand mines the average term of employment is about one year at a time. In the mines of the Gold Coast much of the labour comes from the neighbourhood and is on short contract, so that the problems connected with a resident population are not acute; the question of providing accommodation for the wives and children of the employees is, however, beginning to arise in some of the larger mines. There is a comparatively small resident population at the Nigerian tin-mines. On the other hand, there is now a considerable resident population in the copperbelt of Northern Rhodesia,² where of late years increasing provision has been made for the families of employees. The Katanga coppermines and some of the Congo goldmines³ seek to encourage the growth of a permanently established native population under the control of the mine management, in the hope that, in the course of time, all the labour required will be available on the spot.

Where the population consists chiefly of male labour working for short periods, the problems arising are mostly those connected with welfare conditions; the task of control and supervision is comparatively simple, and is largely left to the employer, subject to inspection on behalf of government. More difficult problems are encountered in areas where the employees are permanently established with their families, for there an obligation arises for the discharge of responsibilities, both in the field of judicial regulation and the satisfaction of social needs created by the special conditions of these populations. They are, however, rendered easier of solution by the fact that the residents are engaged in one type of occupation and are under the industrial control of a single employer. Far more complex are the problems of the urbanized native group which has grown up out of mere proximity to a European centre, and has not even the homogeneity that arises from common employment. Here are found shop assistants,

¹ See Chap. XI, p. 672.

² Ibid., p. 675.

³ Ibid., p. 681.

garage mechanics, unskilled labourers, persons making a livelihood from such new trades as the existence of the group provides, such as letting lodgings or trading, where this is allowed, and the margin of unemployed which the organization of modern industry seems inevitably to involve. These groups are not linked up with any one economic enterprise, and their administration must be a matter of general policy. Adequate housing, education, medical services, and facilities for recreation are regarded in Europe as social services essential in every urban centre, but African administrations have not all been equally ready to accept responsibility for making such provision. All these groups are, again, alike in the fact that their members do not accept any common code of ethics or system of law; yet this does not mean, as was too readily assumed in assimilationist theories of a generation ago, that they have so far cast off the shackles of tradition that they may be expected henceforth to live in accordance with the principles of European civilization. That assumption was the basis of the *immatriculation* procedure provided by the Congo Free State, whereby natives might be registered as subject to European law—a procedure which modern authorities in the Congo are not eager to popularize.¹

The fact that in many ways these populations have inevitably departed from the manners and practices of their ancestors has led to their being generally described as 'detribalized'. The term is widely used in discussions on African questions, and is conspicuous for the variety of implications it carries. It is sometimes assumed that there are two distinct categories of native society, the 'tribal' (or even 'tribalized') and the 'detribalized'. To those who attach importance to the tribe or group organization as the source of social standards and as providing the sanctions for social behaviour, any African who leaves that organization is liable to be considered as falling, in greater or less degree, into the category of the 'detribalized' or *déraciné*, and, in this condition, to be deprived of the standards of conduct which have hitherto been his guide in life. There are also those who believe that the African, when once he has passed out of the 'tribal' condition, should be regarded as having abandoned his African mode of life for one more closely

¹ See Chap. VII, pp. 277-8.

resembling that of the European. The reality is far less simple. If the use of the term is intended to divide the native population of Africa into those who are and those who are not europeanized, it merely introduces a false simplicity into a complex situation. Educated Africans by no means always dissociate themselves from their tribal allegiances; indeed, on the Gold Coast educated men proudly acknowledge membership of native stools.¹ Both inside and outside tribal territory an indefinite gradation of reactions to European influences can be observed; in the Transkei we find the African doctor, a University graduate, living in close touch with his own people, though doubtless with different material standards, while in the urban locations we see the unskilled labourer who, born and brought up there, still pays the bride-price for his wife, and would slaughter an ox on the appropriate ceremonial occasions if sanitary regulations did not prevent it. It is again noticeable that families to whom some mining enterprises offer inducements to settle down and found a permanent industrial population, and who work at the mines for years, appear to retain their traditional relations with their chiefs during their absence at the mines, and return home in their old age. If there is any unequivocal sense in which the term could be used, it would be applied to those natives who have lived for some generations in urban centres, have no close connexions with their tribal society, and cannot make good any claim to land in its territory. It will be desirable, when dealing in the following pages with the native in urban centres, to give a general description of the conditions in which he lives, without attempting to discriminate between those who are in greater or less measure 'detribalized'.

(b) *South Africa*

It is not necessary for the present purpose to dwell on the situation created by the very large number of natives, amounting now to over 300,000, who live in the compounds of the Rand mining area. As shown elsewhere, they present special problems of their own;² our concern here is rather with the general problems arising from the growth of African populations as part of, or in the neighbourhood of, European residential or industrial towns. These

¹ E. H. Brookes, op. cit., 1934, chap. vi.

² See Chap. XI, pp. 672-4.

problems have assumed increased importance owing to the action taken in recent years to implement the policy of territorial segregation. This implies in principle that no natives will reside outside the areas scheduled for their occupation except those in the employment of Europeans, or handicraft workers and others essential to the needs of resident natives; but though the growth of a permanently resident native population in the urban areas has always been regarded as undesirable, it has now been proved inevitable, and the aim of policy is to restrict the numbers as closely as possible. The insanitary conditions in which such populations lived in some of the larger towns of the Union were the subject of comment by successive commissions of inquiry from 1903 onwards, though action was not taken till the high death-rate among them in the influenza epidemic of 1918 had made a profound impression on public opinion. In 1921 the census revealed that, in the decade from 1911, the number of native women in urban areas had increased by 50 per cent. as compared with an increase of only 7 per cent. in the male population, a development which was held to indicate the extent to which the permanent resident in the urban area was taking the place of the migrant labourer.¹ By 1936 the urban native population was over 1,000,000, approximately one-fifth of the total native population of the Union, the number of women in urban areas having more than doubled since the preceding census; of the total number, only some 300,000 were registered at the end of 1935 as employed in mines and works.² A recent survey of forty-one towns, with a total native population of 537,284, showed that, of this number, 72 per cent. had no intention of returning to the native areas.³

The aim of the Natives (Urban Areas) Act introduced in 1923, with its subsequent amendments, has been to provide satisfactory accommodation for native urban populations in separate areas and at the same time to limit the numbers resident. These measures apply, upon proclamation, to all urban natives except those who are allowed to reside on their employers' premises, the employees of large enterprises which undertake responsibility for

¹ J. F. W. Grosskopf, *Weltwirtschaftliches Archiv*, vol. xxxviii, p. 430.

² *Official Year Book of the Union of South Africa*, 1934-5, p. 1014.

³ *Report of the Interdepartmental Committee on Native Education*, 1935-6, U.G. 29, 1936, para. 454.

the provision of housing for the labourers, and certain classes specifically exempted. Every municipality is required to set aside land, known as a location, for native occupation and to provide housing on a plan approved by the Ministry. Employers of natives who do not make other provision may be required to provide or hire approved accommodation for their employees in these locations. The Governor-General may, by proclamation, prohibit the residence of unexempted natives outside their approved locations, if suitable accommodation has been provided in them. Section 12 of the Act empowers municipal authorities in areas proclaimed for the purpose to take measures to control the entry and residence of natives within their boundaries. The measures generally adopted are that every male native entering such an area must report for registration and obtain a visitor's permit or a permit to seek work, and that he must be registered, a fee being charged for registration; and that a native who does not find employment within a prescribed period may be ordered to leave the urban area, though this period may be extended by the administrative officer. Under an amendment introduced in 1930 the entry of women may be prohibited, except in the case of a woman whose husband or father has resided in the urban area for two years and for whom suitable accommodation is available. This rule is not enforced with any success, as women do not carry passes and their movements cannot be easily checked. Natives adjudged by a magistrate to be idle, dissolute or disorderly, habitually unemployed or without honest means of livelihood, may be summarily removed to their homes or to a labour colony. The law exempts certain classes of natives from registration—namely, Cape voters and persons exempted from native law, registered owners of urban property, approved chiefs and headmen, and approved ministers, teachers, and interpreters.

A further amendment of 1930 provided that in urban areas specially proclaimed the entry of natives might be prohibited altogether, except in accordance with prescribed conditions. By March 1935 nine areas had been so proclaimed. A recent measure has proposed to go much further in this direction. The Native Laws Amendment Act of 1937¹ provides that the municipal

¹ See Chap. XI, p. 665.

authorities may be required by the Union government to introduce measures for controlling the entry of natives which are much stricter than those of section 12 of the Act of 1923 as amended in 1930. Under the Act of 1937 permission to enter a proclaimed area may be refused if there is already a surplus of labour available; employers, other than mining companies, seeking to introduce natives into the urban area must obtain permission and must repatriate them at the termination of their employment. Every two years the municipal authorities must render reports to the Minister for Native Affairs, showing the numbers and occupation of the natives resident within the urban areas, the numbers estimated as necessary for reasonable labour requirements, and the surplus which the urban local authority desires to have removed. In areas proclaimed for the purpose the Minister may require the removal of surplus natives, specifying the individuals to be removed. Apart from the obvious hardship of eviction, the Act would seem likely to involve great practical difficulty in calculating the amount of labour required; the process of choosing the individuals to be ejected lays itself open to obvious abuse. Moreover, it is clear that the Act has a wider implication than a mere restriction of the numbers of natives in town areas; its objective is to prevent the growth of a stabilized native urban population. It makes it a criminal offence for a native to acquire land in an urban area (including a location) otherwise than from a native already holding rights therein. Again, it strengthens the 1930 provision regarding the entry of women: the certificate of residence may be cancelled at a month's notice.

The maintenance of the location is provided for by the local authority out of a separate Native Revenue Account, into which all income derived from the locations is paid. The main sources of revenue are rents and fines; special grants may be made from general municipal revenues. The only statutory contribution of the European taxpayer to location funds is the fee, usually of about 1s. a month, paid by employers for each service contract, a charge which in the absence of a minimum wage can be shifted to the employee. In the Transvaal, however, the fee is collected by the administration and paid into the provincial council funds. Some local authorities make up annual deficits in the Native Revenue

Accounts. In Bloemfontein in 1933 a deficit in the fund created by an extension of sanitary services was met by an increase of 6*d.* per month in stand fees and 6*d.* per month in lodgers' fees.¹ In Natal the Native Revenue Account derives a large income from municipal beer and trading monopolies.

Whatever views may be entertained as to the policy underlying the original Act of 1923, it will have been seen that it contained one provision of great advantage to urban natives—that which laid on local authorities the obligation to supply adequate accommodation for those natives whose residence in or near the urban centre was held to be desirable. Up to the end of 1932 Johannesburg had expended £1,100,000, Capetown £300,000, and Durban £170,000 on the improvement of native housing.² By the end of 1936 the Union government had authorized, under the Housing Act of 1920, loans totalling £1,537,666 for non-European housing schemes to various municipalities; of these £503,467 was for subsidized housing.³ On January 24, 1937, it was announced that the government intended to make at least £4,000,000 available to local authorities for housing improvements, but the proportion in which this will be distributed between the European and native population was not stated. The municipal authorities either themselves construct the houses in the new locations and rent them to natives, as has been done at Johannesburg, or make advances to natives for the purchase of materials with which they build their own houses, repaying the loans by instalments added to the site-rent; this is the policy of Bloemfontein, Kroonstad, and Uitenhage. In the former case the effect of the colour-bar policy, directly through the employment of 'civilized' labour, indirectly through the purchase of materials in whose production the colour bar has been applied, has meant that the cost of building has been so great that a rent sufficient to yield an economic return is beyond the means of the native tenant; the provision of adequate housing then becomes a drain on general municipal revenue to an extent which tends to deter the local authorities from making any further provision.⁴ It was estimated by a member of the Central Housing

¹ Evidence of Mr. J. R. Cooper to Industrial Legislation Commission (unpublished).

² H. Rogers, *op. cit.*, p. 196.

³ *Central Housing Board Report*, 1936, U.G. 23, 1937, p. 27.

⁴ *Report of the Native Economic Commission*, 1930-2, U.G. 22, 1932, para. 506.

Board that a three-roomed dwelling is the best type of accommodation that most municipalities can provide at an economic rent, whatever the size of the family to be housed, this estimate being based on the assumption, generally made in connexion with these schemes, that a fair rent represents one-quarter of the tenant's wage. On the recommendations of a conference on slum clearance held in Capetown in January 1936, it was decided to reduce the interest rate on loans for subsidized housing schemes to $\frac{3}{4}$ per cent. In these schemes the local authority is required to forgo $2\frac{1}{2}$ per cent. of the economic rental, while the Union government contributes a further $2\frac{1}{2}$ per cent. A number of municipalities have objected that even this is a heavy charge.¹ It would appear that the burden of the subsidy is the principal obstacle to the development of social amenities in these areas; Bloemfontein was described in 1935 as 'the only centre where rentals for native dwellings come within economic reach of the natives' wages'.²

In some of the new locations the standard of housing is high. In Port Elizabeth electric light is provided in all houses, while in Durban, though the sole provision for married couples consists of 120 cottages, these have electric light and water laid on. At Bloemfontein the native residents have themselves erected houses of a very good type, and are noticeably 'house-proud'; here areas have been set aside for garden allotments, and the conditions generally are among the best in the Union, a result to which the declaration of a minimum wage for natives in this area³ has possibly contributed. In Pietermaritzburg and the Bantuli location, Pretoria, the houses have gardens, and in Langa Native Township, Capetown, the Native Economic Commission stated that the type of house would attract European tenants. This, however, is clearly not true of the Capetown bachelor quarters, with their concrete beds; and 1,403 of these have never been occupied.⁴ Johannesburg has two sets of such quarters, the Wemmer and Wolhuter Hostels, with iron beds, hot and cold water, and facilities for cooking. In the Wolhuter buildings an attempt to meet the needs of educated men is made by providing rooms to be shared by

¹ *Race Relations*, vol. iv, no. i, 1937, pp. 29-30.

² *Central Housing Board Report*, 1935, U.G. 18, 1936, p. 6.

³ See Chap. XI, p. 686.

⁴ Minutes of Cape Town Municipal Council (unpublished).

two lodgers only, but the usual complement of a room is ten. In spite of the large accommodation provided in the hostels, they are overcrowded. Even public rooms are filled with beds to relieve pressure. Johannesburg has opened a new location, the Orlando Native Village, which is described by the Central Housing Board as 'a self-contained model native township with schools, parks, recreation hall, hospital, churches, shops owned and run solely by natives, administrative buildings and a railway station';¹ most of these amenities have, however, yet to be created.

The Native Economic Commission visited the native locations of the nine principal towns of the Union, and their report gives a brief description of each.² They note the lack of amenities provided for recreation; in the large locations there is an area available for sport, but it is frequently a mixed blessing, since the dust created by a concourse of people causes serious discomfort to the surrounding houses. Johannesburg, Port Elizabeth, Kimberley, Pietermaritzburg, and Durban have municipal recreation halls, the two last named using the beer halls for this purpose; in Bloemfontein a full-time native welfare officer has his head-quarters in a recreation or community hall which is maintained by the Town Council; in Pretoria a hall has been privately donated to the location natives. Johannesburg has recently opened a swimming-bath.³

Schools run by missionary bodies are found in both large and small locations. Except in the case of small schools which do not conform to any standard, the work is subsidized by the Provincial Education Departments in so far as the teachers' salaries are paid. The buildings are often inadequate and the equipment insufficient.⁴ Public hospitals in the Union have native sections in which attention is given free of charge in almost all cases. At Johannesburg a non-European hospital has 300 beds for natives, though there are usually more than this number receiving attention; Bloemfontein, Pietermaritzburg, and Pretoria finance provision for natives in municipal hospitals; other hospitals provide attention in out-patient departments. Bloemfontein maintains a dispensary with a full-time European doctor in charge, and a child

¹ *Report*, op. cit., U.G. 18, 1936, p. 8.

² *Op. cit.*, U.G. 22, 1932, pp. 65 ff.

³ *Municipal Native Affairs Department Report*, 1936.

⁴ *Report of the Interdepartmental Committee on Native Education*, 1935-6, p. 74.

welfare clinic with a staff of three native nurses. Kimberley has two dispensaries with child welfare centres under qualified European nurses in two of its three locations. In the Pretoria locations a Health Officer conducts a daily dispensary for children; the Johannesburg locations are visited by a doctor three times a week, and two trained native nurses are permanently resident in each village. Pietermaritzburg employs one native midwife, Port Elizabeth one native nurse, Pretoria a coloured midwife and native nurses. In many of these cases the provision of health establishments is obviously on a small scale.

In the Orange Free State native trading is not encouraged; the Municipal Association for that province in 1932 expressed the opinion that 'the native is permitted to be in urban locations only for the convenience of the European employer and no trading facilities may be granted to him',¹ and this policy is still adhered to. On the other hand, although trading licences are not granted, hawkers' licences and licences to deal in foodstuffs are allowed. In the other provinces, especially where Indian trading takes place, many local authorities actively encourage native trading; there the difficulties in the way of native commercial enterprise may be said to lie rather in the native peoples' preference for dealing with the more experienced non-native trader than in official discouragement. In Pretoria, and in other locations such as the Langa Township and the Orlando Native Village, trading is restricted to natives, and the local authority often owns shops which are hired to natives. Licences, however, tend to be granted mainly for the sale of food. In the Western Native Township a co-operative store, opened in 1931, is a new venture in native trading. The previous policy of prohibition of the brewing of native beer in the Transvaal has been considerably modified by the Native Laws Amendment Act of 1937. This Act prescribes that, if beer is not supplied through a municipal beer hall or by natives allowed to brew and sell, domestic brewing shall be allowed;² all the towns on the Reef have applied for, and are being granted, a monopoly to brew and sell beer. In Johannesburg itself the municipality has decided to erect municipal canteens, not as yet in the locations,

¹ *Report of the Native Affairs Commission, 1932-3, U.G. 3, 1934, p. 5.*

² See sections xix, xx, and xxi.

but to cater for the men living in the hostels or resident as domestic servants in the suburbs. The conditions prevailing under what was virtually prohibition were not satisfactory; in most locations beer is brewed and sold,¹ and the enforcement of the law resulted in police raids and prosecutions which in 1936 totalled over 70,000.² In the Free State it was usually permitted to private persons to brew subject to licence, while in the Cape this system and prohibition were equally prevalent.³

The facts regarding the authorized locations have been given in some detail, for, whatever drawbacks some of them may have, they still represent an attempt to discharge the obligation to provide accommodation for the native urban population. But these locations are limited both in size and number. To some extent the standard of building adopted has, in itself, prevented its extension; it is at all events the fact that a large population continues to live outside the locations in most unsatisfactory conditions and often in slum areas. The condition of most of the slum areas can only be described as deplorable, and the government has admitted the urgent need for improvement. An Elimination of Slums Act, passed in 1934, increased the powers of local authorities to order the demolition of insanitary premises, and was applied from the date of its promulgation to eight of the large municipalities of the Union. A study of the existing situation in these centres was made at the end of 1935 on behalf of the Union Housing Board. In Durban at least 30,000 non-Europeans, nearly half of whom were natives, were reported to be living in 'primitive insanitary shacks'.⁴ In East London, in 1935, 20,000 non-Europeans were living in peculiarly insanitary conditions out of a total non-European population of 25,368. Johannesburg had established by 1936 four native villages with a total population of some 54,000.⁵ The population of Orlando Native Township was 12,000 in 1935, and is expected to amount to 60,000 by 1940; the maximum contemplated is 80,000. It is estimated that 9,000 more dwellings for natives are required, and the municipal authorities consider that the need is too urgent to allow of their construction by native labour. In

¹ See E. Hellman, 'Methods of Urban Field Work', *Bantu Studies*, vol. ix, no. 3, 1935.

² *Official Year Book of the Union of South Africa*, 1937, p. 424.

³ H. Rogers, *op. cit.*, p. 193.

⁴ *Report, op. cit.*, U.G. 18, 1936, p. 6.

⁵ *Municipal Native Affairs Department Report*, 1936.

Pietermaritzburg satisfactory housing is available for such natives as remain within the municipal boundaries, but only because of a drastic reduction in their numbers by expulsion, as a result of which 'large numbers of families are squatting in rack-rented shacks on privately owned Indian and other freehold land'.¹ In Pretoria the three native locations in 1930 had a population of 9,663, while the total native population in 1936 was 34,334. It must, however, be remembered that some of those included in the numbers of total population live outside the locations in small huts or in rooms on their employers' premises or in compounds maintained by businesses and industries; in many cases this accommodation is superior to that provided by the municipalities.

Other considerations besides actual lack of accommodation militate against the transfer of natives from the slum areas. The new locations are, in most cases, farther from the natives' place of employment, so that both the time and the cost of travelling are increased; indeed, Durban and Johannesburg have recognized the necessity of meeting this by reductions in the rents charged. Residents in the new locations are debarred from a number of subsidiary sources of income, some legitimate, others not, which are open to the slum dweller. The number of lodgers is controlled, though in practice this control is often evaded,² and it is said that in at least one of the locations, Bantule in Pretoria, some 50 per cent. of the houses are occupied by more than one family. Illicit beer-brewing is more profitable in the slums, since the clientele is closer at hand and the practice less easily detected.³ It is indeed clear that the attempt to improve the standard of native housing cannot be fully effective so long as general economic conditions render life at the new standard difficult for the great majority of natives.

Subject to the financial control of the Department of Native Affairs, the administration of the locations is in the hands of the local authorities. Some of the large municipalities have their own Native Affairs Departments, whose officers in many cases give evidence of having been selected for their knowledge of the special problems with which they are confronted. Consultation

¹ *Report*, op. cit., U.G. 18, 1936, p. 8.

² *Race Relations*, vol. iv, no. 1, 1937, p. 28.

³ See E. Hellman, 'Native Life in a Johannesburg Slum Yard', *Africa*, vol. viii, no. i. 1935, p. 44.

of native opinion is provided to a limited extent through the creation of native advisory boards, consisting of not less than three native members, with a chairman who may be a European and is usually the location superintendent; in Johannesburg and in other centres this official is *ex-officio* chairman; their members may be either elected or nominated. The presence of the location superintendent is the subject of criticism by natives, who feel that it hampers the free expression of grievances. The functions of these boards are at present purely consultative; but by extending their powers and responsibilities, as for instance in the oversight of roads or the control of sanitary services, it might be possible to develop them as organs of native self-government. Experience has shown, too, that sympathetic European chairmen can use the good offices of these boards for a variety of purposes in which the interests of natives are concerned; while they can be relied on to explain to the general population the object of local regulations, and to bring before the authorities demands for additional services and complaints of other kinds. The advisory boards now elect, on behalf of their locations, a senator under the Representation of Natives Act,¹ a provision which has added importance to their status.

Since it is a principle of South African policy that only natives living under tribal conditions shall be subject to the jurisdiction of native courts,² the urban populations are subject in all criminal matters to the European code, and in civil matters their cases are tried by courts with which the application of native law is discretionary.³ The legal problem is in some measure mitigated by the fact that native standards of conduct in the larger urban areas show signs of a gradual adoption of European observances; monogamy is accepted as the usual pattern of urban marriage, and tribal customs of marriage and inheritance tend to become modified or disappear. In the absence of any recognized native authority, the responsibility for the maintenance of order rests upon the European magistrates and police, and it is achieved largely by regulations restricting individual freedom of action. Control, in effect, rests upon the system of registration of all native inhabitants, the pass system, whose operation is discussed elsewhere,⁴ and

¹ See Chap. VI, p. 152.

³ See Chap. VII, p. 283.

² H. Rogers, *op. cit.*, p. 231.

⁴ See Chap. XI, pp. 664-72.

the use of the wide authority given to expel natives from the locations. Curfew regulations, the right of the superintendents to enter premises at any time, to exclude undesirable visitors, to limit the length of visits, or prohibit entertainments, are other characteristic features of the system. There are not wanting instances of authorities who seek to rely upon co-operation with native opinion rather than on the use of these powers, which, however, remain the legal basis of urban native administration.

(c) South-West Africa

In South-West Africa Proclamation no. 34 of 1924 provides for the establishment and control of native locations in urban areas. Locations have been established in the six municipalities of the territory. Only natives may reside or carry on business in these locations. Revenues received from natives residing in the location, also pass fees collected from employers, are spent on the improvement of the location. At Walvis Bay £6,000 was spent in 1924 on buildings and sanitation in the location controlled by the administration. The proclamation provides for the establishment of advisory boards, consisting of not less than three natives resident in the area of jurisdiction of a local authority, to advise upon the management of the location; no location regulations may be made or withdrawn without consultation of the board. The sale of Kaffir beer is controlled in urban areas, and profits from this source are also devoted to the improvement of locations.

(d) Southern Rhodesia

In Southern Rhodesia the position of the native in urban areas has only of recent years presented itself as a problem. Though the average numbers in industrial employment in 1934 were 79,116 indigenous and 104,963 non-indigenous Africans, the Chief Native Commissioner's report for that year estimated the number permanently resident in both mining and urban areas at only 6,906. Of this number, the proportion resident in the urban centres is small, though in certain cases settlements, so far brought under no regular system, have grown up at a short distance from them, and are beginning to present the usual problems. The

Native Urban Locations Ordinance of 1906 empowered the administration to establish native locations and require the residence of natives in them, to introduce a registration system and pass and curfew regulations, and to impose conditions on the entry of visitors. Under this law the government undertakes responsibility for the provision of housing, and dwellings other than those provided by government may not be occupied without written consent.

Native locations have been constructed at Salisbury and Bulawayo. In the former there are some 1,000 rooms, with a population of between 4,000 and 5,000; the cottages were constructed by white labour, and the rent, 11s. a room monthly, is high; the residents are either better-paid natives or those who can take in numerous lodgers. Quarters are provided for unmarried men, where a room can be shared by four at a cost of 2s. 9d. a month to each person. Both the locations appear to be overcrowded. There is as yet no advisory body appointed. For some time little action was taken under the sections of the Ordinance of 1906 which provide for the restriction of entry of natives into urban areas, but a recent law, the Native Registration Act, 1936, applies a more extended system of control to the entry and residence of natives in such areas. Natives entering proclaimed townships to visit or to seek work must obtain a pass, which may be refused for prescribed reasons; provision is made for the erection of hostels to furnish temporary accommodation for such natives as are not allowed to find lodging on native premises. The Land Commission of 1925¹ recommended that native village settlements, of a semi-rural type, should be provided in the neighbourhood of the large towns, a measure which would seem to recognize the existence of a stabilized non-rural population; so far one such village has been created in the vicinity of Bulawayo,² and another will be built near Salisbury. The Native Urban Locations Ordinance prohibits the sale of intoxicating liquor, and the sale and brewing of Kaffir beer is, in the larger locations, confined to beer halls controlled by the local authorities. Since native local government institutions here are relatively undeveloped, the anomaly presented by these mixed populations in territories where traditional native

¹ *Report*, C.S.R. 3, 1926, paras. 384-90.

² *Native Land Board Report*, 1936, C.S.R. 24, 1936, pp. 7 and 8.

authorities have been endowed with extensive powers does not arise; the impending recognition of native courts will raise the question whether any counterpart to them should be devised in the urban centres, or whether the administration of justice should there be left in the hands of European magistrates.

(e) *Northern Rhodesia*

In Northern Rhodesia there are urban populations of mixed tribes in the municipal compounds at Livingstone and Ndola; and in the compounds at Lusaka, Broken Hill, Luanshya, and elsewhere there are considerable numbers of natives, domestic servants, and employees of industries and stores, living on their employers' stands, often with their wives and children. No figures are available, but the total native urban population, exclusive of mine employees, cannot be far from 30,000, of which the old and the new Ndola locations alone house about 3,000. The majority of these people are temporary residents and are likely to return to the rural areas.

The management of native locations is controlled by regulations under the Municipal Corporation Ordinance of 1927 as amended in 1929 and, in the case of the areas other than municipal, by the Townships Ordinance of 1929. Both municipalities and townships erect houses or lease plots on which the occupier builds his own house. The location superintendent may for any reason give an occupier a month's notice to quit; but compensation must be given for buildings which he has erected, and he may appeal against the order. Trading rights are not at present regulated.

In many of these locations housing conditions are far from satisfactory; the natives often live in insanitary huts erected by themselves on plots leased from the local authority, and subletting causes overcrowding. In the larger locations, however, some effort has been made in recent years to improve conditions. At Ndola an insanitary location is being replaced with brick huts rented to natives and to employers for their native staff. Rents are as high as 7s. 6d. a month for married quarters, and although employers are obliged by law¹ to provide housing, the burden of payment often falls on the native himself. There is a

¹ The Employment of Natives Ordinance, *Laws*, cap. 62, sect. 45.

public hall, also a well-equipped government native hospital at some distance from the location, and a government school staffed by a European education officer and native teachers. Good progress is being made in replacing the present Lusaka Township location, which is poorly built and inadequately supplied with water. But it has so far been found impossible to provide adequate housing at an economic rent.¹ The hospitals at Livingstone and Ndola are good. That at Lusaka is to be rebuilt.

In most of the compounds tribal elders assist the compound superintendent in a purely advisory capacity. These elders had in some cases assumed a quasi-judicial role and sat as an informal court, but a move towards forming native authorities and courts from among them has been stopped. The newly formed native Industrial Labour Board considered the advisability of setting up a central native authority whose function would be to formulate a common customary law in cases of conflict, and suggested that native courts with civil and criminal powers should be established, their members being selected by the District Officer after consultation with the local population. Particular importance was attached to the grant of criminal powers on the ground that this would counteract the existing tendency for native administration in the mining and urban areas to fall largely into the hands of the police. The appointment of such authorities was also recommended by Sir Alan Pim.² However, the practical difficulties in the way of forming native authorities and courts among mixed tribes or among people who are in employment and subject to municipal, township, and mining rules have been considered insuperable for the time being.

The unsuitable conditions of the existing locations, both old and new, has led the government to consider the formation of 'African towns' or locations on the lines of a native village at some distance from the European townships. A small model African village was established at Lusaka in 1936, but the desire of employers to have their labourers close at hand, and the reluctance of the native, with his experience of industrial fluctuations, to sink his savings in building, have hampered the formation of such towns elsewhere.

¹ *Report on the Economic and Financial Position of Northern Rhodesia*, Colonial 145, p. 204.

² *Ibid.*, p. 208.

The Industrial Labour Advisory Board advocated the formation of these towns not only to relieve housing difficulties but also to provide opportunities for the development of local self-government in urban areas, by the formation of a native authority composed of a council nominated among the inhabitants, a system which would resemble that of the Belgian *centres extra-coutumiers*. Such a council was set up in 1936 for the African village at Lusaka.

A different problem is created by the large populations living in the locations of the mining companies on the copper belt and at Broken Hill.¹ Fifteen thousand men are employed in this industry and are housed free of rent in huts or rows of rooms; as the companies encourage the residence of a growing proportion of the employees' families, conditions differ considerably from those in the South African mines, where provision is made for unmarried workers only. The number of married employees in the mines tends to increase, and a recent return shows that at the Roan Antelope mine 52 per cent. of the employees were married and the average service was nearly two years.² At Broken Hill the mining company has allowed long-term employees to settle on plots of land on which they are able to keep gardens; at the Roan Antelope mine married employees were given land to cultivate, and extensive gardens were made, though by hired labour rather than by the employees' families as was originally intended; these, however, have now been reorganized to stop cultivation by hired labour. There are now only 203 as against 1,086 previously. The majority of employees live under 'compound' conditions.

The standard of housing is high, and the workers' 'lines' are generally well laid out; there is, as described elsewhere,³ a very adequate provision of health and welfare services. The compounds are in charge of managers; appointed by the companies, subject to the approval of government; on their character and experience much of the wellbeing and contentment of the workers depend. It is clear, however, that much of the detailed management rests with the mine police, though efforts have been made to obviate this by giving the managers the assistance of tribal elders at the

¹ See Chap. XI, p. 675.

² F. Spearpoint, 'The African Native and the Rhodesian Copper Mines', Supplement to the *Journal of the Royal African Society*, vol. xxxvi, no. cxliv, 1937, p. 53.

³ See Chap. XI, p. 675.

mines. Tribal elders exist at the Roan Antelope, Mufulira, and Broken Hill mines; their duties are to supervise the workers of their tribes and bring complaints to the notice of the compound manager. These elders are paid employees of the mines; at the Roan Antelope mine they form a council or workers' committee.¹ The legal affairs of the workers and their families are dealt with directly by the European administrative officer in his judicial capacity or by resident magistrates. In an attempt to meet the need for native assistance in dealing with the civil causes involving questions of native custom, the government has invited chiefs to send representatives to act as assessors in the courts of the District Officers. These men receive salaries: they have no judicial authority but are expected to endeavour to compose disputes.

The sale or brewing of beer in defined areas is forbidden except under licence.² Large beer halls are found in municipal and township areas, the revenue from which finances native welfare schemes: the illicit brewing and sale of beer is a frequent offence.

(f) *East Africa*

In Nyasaland the question of the urban native is not one of importance, as it largely concerns provision for the accommodation of domestic servants, clerks, and the like. The practice in the townships is not uniform. Blantyre and Limbe prohibit the residence in the townships of natives not in employment; Port Herald excludes all who are not domestic servants; Fort Johnston provides for the issue of special permits to other natives, but its town council in 1935, and that of Zomba in 1934, passed by-laws empowering them to order exclusion in the future. In Zomba a model village is in process of construction, and it was expected by the end of 1936 to accommodate all those domestic servants employed in Zomba, together with their families, who cannot go to and from their own homes to work. The village is provided with electricity, water-supply, and a sports ground.

The heterogeneous groups in the coastal districts of Kenya represent the result of that intermingling of Arabs and Africans to which is attributed the origin of the Swahili language,³ and

¹ F. Spearpoint, *op. cit.*, p. 20.

² Native Beer Ordinance 11 of 1930.

³ See Chap. III, p. 89.

which has led also to peculiar difficulties regarding land tenure.¹ The development in these areas of subordinate magistrates' courts has been described elsewhere.²

The problems of urban native administration in Kenya arise from the European character of the newer towns, rather than the size of their native population; these problems were the subject of some suggestions in the report of the Feetham Local Government Commission of 1927, a number of which were subsequently put into practice. The control of native locations and provision of housing is the responsibility of the local authority in municipalities and of the central government in townships. Of the four municipalities, Nairobi, Eldoret, Nakuru, and Mombasa, all but the last have established locations where housing is provided by the authorities. The Nairobi by-laws may be taken as typical: they provide for the establishment of a location in which only natives may reside. They are only permitted to reside elsewhere in the municipality on special permit, except in the cases of employees who are housed by their masters. In the location, plots in contiguous residential blocks are as far as possible allotted to natives with similar religious or tribal associations. Single-roomed and two-roomed quarters have been erected as part of a municipal housing scheme to provide lodgings for natives who cannot build their own dwellings. Plots may also be rented from the municipality on which natives may build their own houses in conformity with building regulations. The by-laws provide for eviction only in case of failure to pay rent, or of more than one conviction under the Liquor Licensing laws. Natives not in employment are prohibited from residence for more than thirty-six hours without a permit, a measure the enforcement of which resulted in the expulsion of more than 1,000 natives from Nairobi in 1930.³

In that year a loan of £50,000 to the Nairobi municipality for native housing was sanctioned by government. The provision made is, however, far short of the requirements; the numbers for whom accommodation is provided were given in 1931 as 6,987, while in the following year the total native population of Nairobi was estimated at 24,000, including a number of employees housed

¹ See Chap. XII, p. 850.

² See Chap. VII, p. 289.

³ *Local Government Report*, 1933, p. 22.

on their masters' premises. About 8,000 not provided for in the township have hitherto resided in the two native villages of Pangani and Pumwani; the insanitary condition of Pangani had long been a matter of adverse comment, and the government as far back as 1922 decided to close the village,¹ but the process of removing the residents has not yet been completed. Pumwani was opened in 1922, and the majority of the houses have been built by natives. It is the intention that this shall be the chief native quarter of Nairobi; both the government and the municipality have undertaken housing schemes for it. Only natives are allowed to trade in the locations and there are many native shops. In Nakuru and Eldoret the natives number only some 4,000 and 1,000 respectively, but in neither case is municipal accommodation provided for all this population. These small locations are laid out on the village plan, and at Eldoret allotments for vegetable growing are provided free of charge.²

The principal source of revenue of all these locations is the municipal beer monopoly, the income from which is paid into a special trust fund. In Nairobi, the District Commissioner is appointed to serve as a member of the municipal council, with a special view to the safeguarding of native interests, and is chairman of the Native Affairs Committee. A government officer has been seconded for service as municipal native affairs officer. Social services are provided for on a more extensive scale than in many native locations farther south. There is a recreation hall, a sports stadium, a maternity home, two dispensaries, and three clinics. A school, erected in 1935 at the expense of the Municipal Trust Fund, is maintained and staffed by government. Since there is, in Kenya, no restriction upon the employment of non-Europeans in building, there has been no complaint that municipal housing cannot be provided at a rent within the natives' means.

Mombasa stands in a different position from the three municipalities above referred to, for it has always had a large native population. The native residents now number some 24,000. There is no municipal provision for native housing. A number of 'native villages' have been laid out on private land by African

¹ *Report of the Kenya Land Commission*, Cmd. 4556, 1934, para. 589. See also J. Huxley, *Africa View*, 1932, p. 271.

² *Local Government Report*, 1933, p. 19.

and Arab landlords, and are marked by the usual features of villages of this class. In 1934 it was announced that no more such village housing schemes would be sanctioned.

In Nairobi some approach to the provision of native local government has been made by the constitution of a council of twelve influential natives who represent different tribes and creeds; it has no statutory authority, but is advisory to the municipal native affairs officer and is said to be helpful. In Kenya, where government throughout the territory is based on councils which nearly always represent more than one native unit, this is less of a departure from the established system than it would be in an indirect rule area. A tribunal, as far as possible representative, was constituted in 1932 by warrant under the Native Tribunal Ordinance of 1930: fees paid by litigants go to the Native Municipal Trust Fund, from which the members of the tribunal are paid; fines are paid to central revenue.

Tanganyika, like Kenya, has heterogeneous populations outside the urban areas. The conditions in some of the coastal districts resemble those described in the coastal areas of Kenya.¹ In the Tanga coastal district the large numbers of non-tribal natives are ruled by village headmen who are appointed and paid by the government, and act under the directions of the District Officer. The principal headmen are appointed native authorities, and are thus able to make orders and rules. The administration of justice is carried out by native subordinate courts of the same type as those in Kenya; there is no native treasury. In other parts of the territory also it has been impossible to find a suitable native authority for a mixed population, and it has been necessary to entrust these functions to a *liwali*, usually a selected headman. A typical case of this nature is that of Ujiji, near Kigoma, on Lake Tanganyika.² The large mixed populations of natives from the western part of the territory, which have settled near the sisal plantations in the east, constitute a somewhat similar problem, and also the 20,000 natives, coming largely from Northern Rhodesia and Nyasaland, who are employed on the Lupa gold-fields. In the former case the difficulty has been met, though not always with entire success,

¹ See p. 515, above.

² *Tanganyika Territory, Annual Reports of the Provincial Commissioners, 1936*, p. 64.

by making alien natives subject to the ordinary tribunals. The conditions of the Lupa gold-fields are exceptional, for most of the labourers come for very short periods, and the chief problems are those connected with the relations between them and the prospectors. Two travelling courts have been instituted to deal with minor disputes and civil cases among natives; the courts consist of the headmen of each of the five 'minor settlements' on the gold-fields; this term describes areas, other than townships, in which sanitary regulations are applied.

The largest urban native population is at Dar-es-Salaam, where it numbers about 26,000. Here an advisory board has been created which consists of six elected elders from the most important tribes. These elders, who are paid salaries, deal informally with disputes which are not important enough to go before the *liwali*, assist in tax collection, and act as a medium between the local population and the municipal secretary. It is proposed to divide the town into six areas, each with one of the elders as a headman, not less than three of whom will preside over a subordinate native court with a right of appeal to the court of the *liwali*; a district officer will then replace the municipal secretary and supervise both the headmen and the courts.

In Uganda it may be said that there is no urban housing problem; the towns are small, and as they do not form part of large segregated European areas, most natives who are employed there are able to live on their own land in the vicinity.

(g) British West Africa

The British territories of the West Coast are distinguished by the fact that an attempt has been made to develop African municipal corporations on the European model. Lagos in Nigeria, Accra, Cape Coast, and Sekondi in the Gold Coast, and Freetown in Sierra Leone, were early constituted as municipalities with partially elected councils, entitled to levy rates. In Lagos the African population is over 100,000 and the non-African about 2,000. Municipal administration began about fifty years ago with a 'Board of Health' which has developed into a town council,¹ consisting of five official members, four elected members, and four nominated members; this council is

¹ Townships Ordinance, cap. 57.

responsible for health and employs two medical officers of health as well as inspectors and social workers: it also provides maternity centres; but other services, such as education, are carried out by the technical departments under orders from government and at the cost of general revenue. The government also assists with special works, such as drainage schemes in public areas. Revenue is collected by an improvement rate and a water rate: the latter is paid to the government, which established and still maintains the water-supply. In the past a government grant of £60,000 was made to the council to cover the difference between expenditure and revenue; owing to an increase in revenue this grant has been reduced to £20,000, out of which the council may retain any unexpended balance. Town planning and slum clearance are in the hands of an official body, the Lagos Executive Development Board. There is, therefore, a considerable element of divided responsibility, and local interest in the services directly administered by government can be expressed only through the elected members of the legislative council; it may be remarked that this interest never seems to be strong except when it takes the form of opposition to taxation.

In the colony outside Lagos there has been a gradual abandonment of local government institutions, such as native town councils, in favour of the rehabilitation of customary authorities, and it has, indeed, been suggested that the degree of loyalty that is still shown to the traditional chief of Lagos, the representative of the house of Docemo, might justify his recognition as part of the administration, thus making the first step towards the development of a local administration with an inherent authority behind it.¹ It is open to doubt, however, whether the extent of the interests which have grown up in Lagos would not involve a degree of control that would inevitably deprive a native authority administration of any reality.

In the Northern and Southern provinces of Nigeria the Township Ordinance provides for the institution of second- and third-class townships, administered by an official appointed as local authority, who, in the case of a second-class township, is assisted by an advisory board. There are thirteen second-class townships and

¹ M. Perham, *op. cit.*, pp. 264 ff.

thirty-six third-class: these are usually government stations or centres of European trade with a mixed native population, which cannot suitably be placed under a local native administration. The native towns are under the jurisdiction of the native authorities. The large native city is a peculiar feature of Yoruba culture; in the Southern Provinces about five-eighths of the people live in towns. In Bantu Africa the largest native town is Serowe in Bechuanaland, with 25,000 inhabitants, while in Nigeria twelve native towns have over 34,000 inhabitants, of which nine are entirely Yoruba; Ibadan has a population recorded in 1931 as 387,133, of which only 226 were non-native. Many of these towns contain a considerable non-Yoruba element, but their long-standing association with the traditional rulers has removed some of the difficulties which a mixed population ordinarily presents.

Kano, a city of 97,000 inhabitants, presents a different problem. The township, which has grown up outside the walls of the native city, contains a considerable number of Europeans and also of non-Europeans, the majority of whom approximate more closely to European ways of life than the local natives.¹ It became clear at an early stage that the emir of Kano, though a powerful and long-established native authority, would have difficulty in dealing with the new elements which a change in economic and administrative conditions had brought to his city. At the period when indirect rule was interpreted to mean that the widest possible freedom of action should be given to native authorities, it was proposed in 1930 to solve this and similar problems by extending their jurisdiction so as to cover all persons within their local limits. The 1933 Native Authorities Ordinance rejected such a solution by which, in Sir Donald Cameron's words, 'we reach again the realm of pretence';² it retained the old provision, which placed all natives who are ordinarily subject to the jurisdiction of a native court under the native authority, but to meet the difficulties arising where non-native or 'stranger native' groups reside in native cities, such as Kano, it empowered the Governor to extend this jurisdiction to persons not ordinarily so subject. Such an extension of authority was made dependent upon the approval of the Secretary

¹ *Ibid.*, pp. 101-3.

² *Address to the Legislative Council*, Mar. 6, 1933, p. 18.

of State, and, in the Southern Provinces, to the consent of the legislative council. At the present time the township area at Kano has its own administration, under a British magistrate and government police, but an arrangement has been made by which the Sabon Gari, the part of this township inhabited mainly by stranger natives, has been given an African ward-head approved by the emir, and assisted in judicial functions by representatives of important tribal groups; appeals from his tribunal go to the alkali's court at Kano.

In 1893 the management of Freetown, in Sierra Leone, was placed in the hands of a council of fifteen members, twelve of whom were elected by the people and three appointed by the Governor. The council elected a mayor from its members. The African population thus controlled the government of the town. The municipality had to be dissolved in 1926 after a series of financial scandals; the Commission of Inquiry found that the council had no practical knowledge of what was implied by the provision of satisfactory municipal services and no standard of comparison by which to measure the success of their activities.¹ It was replaced by a town council with an official majority.

There exists in Freetown a system of tribal control of considerable interest. The Governor recognizes tribal headmen over tribal groups living in the town. Headmen are supposed to be traditional authorities, but the government may appoint a person other than the one on whose behalf representations are made by the community concerned. Until 1932 the headmen had powers to make rules regarding such subjects as indebtedness, the relief of the poor, burials, and education, subject to the approval of the Governor and the town council, but they are not now allowed to make rules, and retain only police powers: they report births, deaths, and new arrivals, and must repatriate natives who have left their chiefdom without authorization. Each native pays 6*d.* a month to his tribal headman; these sums are paid into a bank and are distributed in relief to the sick and poor of the tribe and for burials. The ordinance does not apply to the Kroo natives.

¹ *Report of the Commission of Inquiry into the Affairs of the Freetown Municipality, 1926*, p. 23.

In the Gold Coast the town councils of Accra, Cape Coast, and Sekondi were constituted in 1894.¹ They consist of five official and five unofficial members; of the latter, one is European, nominated to represent the local chamber of commerce, and the remaining four are elected. The councils may levy rates and also receive grants-in-aid from central revenues. In the past, local interest in them has not been great; in the elections of 1922, for example, only forty-six persons voted in Accra, out of an electorate of 1,117; in Cape Coast, none at all; in Sekondi, two out of 299; but if the last elections at Accra and Cape Coast, which were hotly contested, are to be taken as a criterion, the electors are no longer apathetic. The local administration of Kumasi, the administrative headquarters of Ashanti, is in the hands of a Public Health Board constituted in 1925 with resources similar to those of the town councils, and consists of five official members, two members nominated by the Kumasi council of chiefs, two by the Kumasi chamber of commerce, and an African ratepayer, nominated by government, who is not an Ashanti native.

In 1924 it was proposed in the Municipal Corporations Ordinance to give the town councils an elected majority; at the same time the head chief of every division included in a municipality was to be an extraordinary member of the council with the right to address any meeting. The burden of rates was to be redistributed as between owners and occupiers, and new sources of revenue were created. This measure met with opposition, particularly in Accra, partly through the fear of the chiefs that an elected mayor would be in a position to encroach upon their traditional authority;² in 1926 it was announced that its application would be postponed, and no further steps have been taken to put it into effect.

(h) *The Belgian Congo*

In the Belgian Congo the development of a permanent population in the industrial areas is a deliberate aim of policy. The *Forminière*,³ for example, has induced whole villages to migrate

¹ *Laws*, cap. 167.

² *Report on Objections to Municipal Corporations Ordinance*, Sessional Paper I, 1925-6.

³ *Société internationale forestière et minière du Congo*.

to the neighbourhood of their mines, where they continue to live in accordance with native tradition, selling their surplus food-stuffs to the company.¹ The *Huilever*² has followed a similar policy in order to provide a permanent supply of labour for its enterprises. The *Union Minière* of Katanga, on the other hand, when they adopted their 'stabilization' policy in 1927, had not only to look for their labouring population much farther afield, but had to establish it in an area where the soil is poor and the climate unfavourable to agriculture. Although the type of accommodation provided for their employees is that characteristic of the native village, its character, in contrast to that of the *Forminière* villages, is definitely urban. The huts are of good pattern and well built; they are laid out on carefully planned lines. Social services are provided on a generous scale; medical treatment is exceptionally well organized. A bonus is paid to every mother who is confined in a maternity ward; infants are examined weekly at welfare clinics; the proper feeding of young children is ensured through a common refectory at which they have two meals a day. Education is compulsory from five to twelve years; a medical examination of all school children is made once a month.³ A similar system is observed in the villages attached to the Kilo-Moto mines. The administration has not, however, initiated any system by which differences between natives in the mine villages can be settled by a native agency; the matter is left to the superintendents of the locations, who, as observation shows, have a very close acquaintance with their conditions.

In the larger towns a regulation, similar to that adopted in some Rhodesian town areas, limits the number of servants or employees who may reside on the premises of their employers; all others, and such labour as is required in the town or its trades, reside in a *ville indigène* or *cité noire* outside the town. These bear the appearance of being well planned and managed; plots are allotted on leasehold, on which natives erect their own huts or houses of an approved pattern. There is evidence here, as in Bloemfontein,

¹ L. Mottoule, *Déterminisme fonctionnel de l'industrie dans l'éducation de l'indigène congolais*, 1934, p. 18.

² *Cies. Réunies des Huileries du Congo Belge et Savonneries Lever Frères*.

³ See P. Charles, 'Le problème des centres extra-coutumiers' in *Record of 23rd Session of International Colonial Institute*, 1936, Annex II, pp. 33-180.

that the native under this system can evince a great pride in his house and its surroundings. In the Katanga the African and European quarters are separated by a 'neutral zone', occupied either by parks or by native hospitals, schools, and prisons;¹ elsewhere it is usual to find the location at a short distance from the town, and there is a general regulation that non-natives are not allowed in the 'native city' without permission. Trading by natives is freely allowed; there appear, indeed, to be very few non-native traders.

The Belgian administration has recognized that special provision is required for mixed groups, and persons living in circumstances in which they cannot suitably be brought within the jurisdiction of a traditional native authority. For this purpose it has instituted the system of *centres extra-coutumiers*,² and placed in this category the 'native cities' and the settlements of ex-soldiers. The local authority here is a chief with a council of five to twelve members, nominated by the *commissaire de district*; the chief is frequently an ex-employee; the members are chosen from residents in the *cercle*. The chief is responsible for the good order of his *cercle* and can detain natives who cause a breach of the peace in public places up to a maximum of twenty-four hours. The council may make rules on all matters of local interest not regulated by general legislation, and impose a penalty of seven days' imprisonment for offences against them. They may impose taxation for local purposes; as an example of the sources of revenue the Stanleyville *centre* may be quoted, where, in addition to the supplementary tax generally levied for local purposes, there are taxes on musical instruments, on plots of land allotted by the council, on shops, and on palm wine, and a hut tax is levied on unmarried women. The constitution of the *centres* provides that they may receive subsidies from the general revenue of the colony, but the policy seems to be only to give such subsidies when local resources cannot meet essential needs.³ All *centres* in a province are subject to the general supervision of a *comité protecteur*, nominated by the Governor-General, consisting of official and non-official Euro-

¹ P. Charles, *op. cit.*, pp. 74-5.

² Decree of Nov. 23, 1931, amended by decrees of June 6 and 22, 1934: *Codes et lois du Congo belge*, 1934, pp. 144 ff.

³ *Rapport annuel du Congo belge*, 1935, p. 11.

peans, with the *commissaire de district* as chairman, which is charged to supervise the improvement of the moral and social conditions of the inhabitants. The local *agent territorial* attends all meetings of the council of the *centre* and as representative of the government may preside and may veto its proceedings; he also advises it on lines recommended by the *comité protecteur*. It is clear that he exerts over the proceedings of the council an influence which differs little from control. The *centres* have their own tribunals, whose members are *ex officio* members of the council. Their jurisdiction is usually limited to civil cases, in which the development of a common body of law can be left to them; criminal matters are generally dealt with under statute law by a magistrate's court.¹ By the end of 1935 there were twenty-one such *centres* in existence.

(i) *The French Territories*

The problems presented by the urban native populations have arisen in some territories from the policy of segregation, and in others from the difficulty of bringing such communities under the jurisdiction of native authority of the type established under the system of indirect rule. Since the doctrine of segregation is alien to French policy, which admits no colour bar, and the traditional native authority is given no independent executive or judicial powers, difficulties of this particular type do not arise in the French territories. If the numbers in urban centres are anywhere regulated, it is mainly on sanitary or police considerations, and there is no bar on the residence of the 'advanced' native in the urban areas.

Only Senegal and the Upper Volta appear to have made legislative provision for the reservation of certain areas at urban centres for native occupation;² in the Sudan, however, it is the practice to set aside such areas, separated by an open space from the European quarter.³ At Bamako there are native quarters separated from the European town, but only a few minutes distant from it. At Pointe Noire the native quarter is laid out on a circular plan, with roads radiating from an open space in the centre and

¹ See Chap. VII, p. 293.

² E. Maguet, *Concessions domaniales dans les colonies françaises*, 1930, pp. 159, 191.

³ *Congrès soudanais de technique et colonisation agricole africaines*, 1936, vol. i, p. 94.

linked by concentric avenues. Where no commune has been created, these native locations are under direct charge of the administration; chiefs are frequently appointed to act as agents, but without any independent powers.

The theory on which judicial policy is based admits that Africans living under their customary law must be regulated by that law; but the *tribunaux indigènes*¹ are so constituted that the existence of a variety of custom within their jurisdiction does not necessarily create a difficulty. While French policy recognizes the existence of a personal law regulated by custom, its objective—or at all events its tendency—is to bring all its subjects eventually under one system of law and administration based on an adaptation of European conceptions and methods; and the native who passes out of the sphere of his own law is regarded as having taken a course which assists this process. An illustration of the methods adopted to assist its development will be found in what is said elsewhere on the subject of the *immatriculation* of land,² and the special status of French ‘citizens’ as opposed to ‘subjects’.³

XXI. CONCLUSIONS

It was pointed out, at the beginning of the present chapter, that the term ‘native administration’ has a special significance, peculiar to African conditions. It will now be obvious that the terms ‘direct’ and ‘indirect rule’ must also be understood in the special sense in which they are used in Africa.⁴ It has been deemed advisable to describe at some length the different methods of native administration now in actual use, since such a statement of fact appears to be the best contribution which this Survey can make to the controversy on the respective merits of systems of direct and indirect rule. But it may also be of some value to define the issues, often obscured in debate, on which that controversy turns. Neither system owes its origin to any preconceived theory of rule. Every government in Africa has been faced by the initial difficulty of administering an extensive area with a small European staff, frequently ignorant of the local native custom and language; in every

¹ See Chap. VII, p. 290.

³ See Chap. VI, p. 199.

² See Chap. XII, pp. 858–62.

⁴ See above, p. 413.

case it has found itself obliged, in the early days of its rule, to make use of chiefs or other native authorities, and the extent to which it has done so has depended on circumstances rather than on any difference of principle. There has succeeded everywhere a period when administrations, having passed the stage at which their chief effort has been devoted to securing the first essentials of law and order, have had to consider the type of agency best suited to assist in implementing their policy of material and social development. As has been seen,¹ there is a wide difference in the national philosophies of rule which have determined the character which such policies have taken, particularly in respect of the position assigned to the native in the political and administrative life of the country. It is in effect at this point that the difference of opinion begins which has given rise to the controversy as to the relative merits of direct and indirect methods of administration in native affairs. The advocates of the system of indirect rule have not merely attached importance to it as an agency in local self-government, of the value of which they have found evidence in particular in Nigeria and Tanganyika, but have seen in it a special virtue as indicating the correct line of approach to all questions relating to the social and political development of the native. There are, however, many who have not realized that the virtue to which they point is not that of the system of indirect rule, but of the whole political philosophy which has inspired it. The zeal with which the system has been supported in some quarters has encouraged in British colonies an attitude towards it which is not always as critical as could be desired, and also some tendency to employ it in circumstances to which it is clearly not appropriate. In the second place, it has produced from the advocates of the methods of direct rule an answer which, while in terms critical of the efficacy of the institutions utilized under a system of indirect rule, is in reality an expression of distrust in the political theory which has influenced its adoption. The attitude taken on either side has tended at times to some confusion of issues; if it has a justification, it is only to be found in one consideration. It is doubtless inconvenient that a comparison of the merits of two alternative methods used in native administration should involve, on each occasion, a debate on the

¹ See Chap. V, pp. 130 ff.

merits of the ideals of rule which influence different colonial powers; but it is nevertheless difficult to treat any one type of native administration merely as a part of the machinery of government.

If the administration of native affairs is viewed simply in that light, its problem might not unreasonably be described as the search for the most effective means of inducing native opinion to accept innovations which it does not actively demand. In the solution the emphasis may be laid on the necessity for genuine acceptance or on the importance of rapid development. The former is the end sought in the system of indirect rule, which relies on the appeal to the respect of a people for its own leaders, and its pride in institutions which it can call its own. The latter considers rather how best to make rapidly effective the decisions of superior authority, and sees its most efficient agency either in the council system, or in the training of chiefs as subordinate agents of the executive government. But such an analysis fails from its very simplicity. The efficacy of any type of native administration must be viewed not merely in relation to the part it bears in the machinery of government, but in the light of the purpose it is intended to serve in the development of the native population. It is clear, for example, that the form which native administration has taken in the Union of South Africa has been dictated by the conviction that the problem of Bantu development must be viewed primarily in relation to the position which the native must occupy in a society whose principal institutions are European in character. In this view, and it is one which will inevitably regulate South African politics for many years to come, it is not unnatural that the Union should prefer a system of direct administration in native affairs, and should rely on the council system as most suitable to provide the native areas with organs of local self-government. There is another fact which must be taken into account in considering the current policy of the Union in native affairs. There are parts of the Union, such as the Ciskei, where it would now be impossible to find native institutions possessing that traditional position, or likely to find that amount of popular support which would make them suitable agencies of local government. In some other areas, such as Natal, native authorities still retain a position of influence;

and, as has been seen, the Native Affairs Department has lately shown itself prepared to give them a larger measure of recognition, particularly in regard to the exercise of civil and criminal jurisdiction. It is not to be doubted that the type of support which it is now proposed to give to the chiefs in these areas may have its value in providing tribunals, dealing with a limited range of civil and criminal issues, whose decisions will give more satisfaction to Africans than those of the courts now available to them. But, taking the longer view, it is doubtful if a policy of utilizing traditional native authorities, in the manner in which they are utilized under systems of indirect rule, is one which could be advocated in the interests of the Union natives. It is admittedly difficult to envisage the day when the Bantu will be admitted to full rights of citizenship in the Union, but that day would certainly not be hastened by the adoption of a system which seeks to give vitality to the customary institutions of the native, as being the medium through which his development is to be achieved, and assigns to them in consequence a position of increasing importance in the state organization. Nor is the traditional authority suitable for adoption as an agency for managing the large native populations resident in the urban centres of the Union.

The sentiment which manifests itself in support of the council system in South Africa is based on the conviction that the circumstances of the Transkei, and of other territories where the play of europeanizing influences is producing very rapid changes in every aspect of life, call for the creation of new institutions which respond to new needs, rather than the preservation of authorities whose bonds with their subjects are broken. The positive advantages of the council system are its procedure, designed with a view to its functions, and its representative composition. This is held to be not only a necessary safeguard against misgovernment, but to have in African circumstances the special advantage of enabling educated natives to take part in local government. The details of the system as it now operates in the Union have already been given at some length. It is natural that attention should concentrate on the performances of the most conspicuous of its institutions, the General Council in the Transkeian Territories. The achievements of the Bunga¹ are

¹ The Councils in the Transkei and in the Ciskei are known as Bunga.

undoubted. Every one who has been present at its sessions has been impressed by the dignity of the proceedings; no one denies that genuine opinion is freely expressed. In the sphere of general politics it has now become the core of a central native council for the discussion of questions affecting the native population, while in Tanganyika, such a native council, envisaged by Sir Donald Cameron¹ as the ultimate development of indirect rule, has not yet come into existence. The extension of the council system to other parts of the Union is progressing slowly; the powers of the Native Council are at present not wide, and at all parts of the system European control is close. Nevertheless, the constitutional framework for a series of representative local governments covering all preponderantly native areas, culminating in a Native Council for the discussion of general policy, is in existence in the Union, alone of African territories.

General Smuts has written of the councils:

'They look after their own local interests, find useful expression for their political energies, and get an invaluable training in disinterested public service. A sense of pride in their institutions and their own administration is rapidly developing and, along with valuable experience in administration and public affairs, they are also acquiring a due sense of responsibility; where mistakes are made they feel satisfied that they have only themselves to blame . . . in this way they will get an outlet for their political and administrative energies and ambitions which will give them the necessary training for eventual participation in a wider sphere of public life.'²

The picture drawn by General Smuts applies in particular to the Transkeian General Council, but it does not perhaps take sufficient account of the limitations placed on its executive responsibility. As has already been remarked, the true character of the institution as an organ of local self-government will only appear when magisterial control from within gives place to supervision from without. The possibilities of internal development depend partly on the degree to which responsible magistrates regard the councils as a training ground for future native leaders, and partly on the aptness of the native members for such training. The European element in the Bunga is rightly regarded as its strength; to

¹ *Principles of Native Administration and their Application*, 1934, pp. 3, 7 ff.

² *Africa and Some World Problems*, 1930, pp. 84-5.

its initiative and guidance the constructive work achieved, and the efficiency of the public services maintained, are admittedly due. But so long as all authority remains in their hands, there must be a danger that the councils may be overtaken by the fate of all bodies so constituted; they may decline into apathy or they may, on the other hand, be driven by a sense of their own powerlessness into an unreasoning and irresponsible opposition.

In Southern Rhodesia the system of direct rule, though it rests in principle on the same basis as in South Africa, is seen in a less fully developed form. The liberal provision made for native lands is a noticeable feature of Southern Rhodesian policy; but the extent of the consideration so far given to the native's need for suitable tribunals to try civil or minor criminal issues, or for institutions which will give him some responsibility in matters of local concern, makes it difficult to say that the government has yet evolved a comprehensive scheme for the regulation of native affairs. Kenya, on the other hand, has in operation a fully developed system of native administration, based on the creation of district councils presided over by an administrative officer, with native courts whose members are nominated for the purpose. The adoption of this system is not due to a conviction, such as is entertained in the Union, that the real welfare of the Bantu lies in his rapid assimilation of the use of 'civilized' institutions; it had its origin in the fact that the experiences of the Kenya government did not give it a confidence in its traditional authorities sufficient to justify their use as judicial tribunals or agencies of local government. It is claimed for the Kenya system, that it is that best adapted to areas where Africans are continually in close contact with Europeans, and that it has an advantage, which is of much importance in those conditions, in that it provides opportunities for educated natives to take a part in local government.¹ It is possible, however, that the system is not equally well fitted to all parts of the colony, and that some adaptation of the system of indirect rule might perhaps be better suited to the tribal areas which are not in close contact with Europeans.

¹ *Report on the Financial Position and System of Taxation of Kenya*, Colonial 116, 1936, p. 109.

In the French territories the support given to a system of direct rule is deliberate. If British sentiment tends to favour the creation of institutions which furnish a training in self-government and appear to point to possible autonomy in the future, that is no essential part of the French theory of rule. The goal to which it seeks to conduct its colonies is not independence, but a progressive association with French methods of administration and with French economic and social institutions. It is natural that, in this scheme of development, the traditional institutions of the native should not appear to have that intrinsic value which the scheme of indirect rule assigns to them; they may be said to have a value only in so far as they can be utilized in order to serve the general purpose of the policy of association. From the earliest days the French have, like other colonial governments, made use of the chiefs, and up to recent years, if the traditional chief did not prove himself to possess the requisite capacity as an agent of the administration, there was little hesitation in replacing him by a nominee, not necessarily from a family possessing local authority, and sometimes even an ex-soldier or other subordinate. To-day the French recognize the value of the influence which the traditional chief or headman can bring to the service of the administration; on this point they are in full accord with those who favour the system of indirect rule, and in principle at all events persons who have no traditional claim to authority are not now appointed as chiefs in French West Africa. But chiefs continue to be only the agents of the administration, with no independent powers of their own, either judicial or executive; and France has less hesitation than Britain in removing them from office. It is, for example, noteworthy that in the Cameroons a number of lamidos who had ruled for many years have lately been removed from their posts.¹

It is claimed, not without some justice, that this system places in the hands of the administration a more efficient and better controlled agency for development than any alternative system now to be found in Africa. The chiefs are now an educated class, trained at one of the chiefs' schools where the policy for which they

¹ *Rapport annuel au Conseil de la Société des Nations sur l'administration du Cameroun pour l'année 1934*, p. 38.

are to be the agents is thoroughly explained to them.¹ If the system of *justice indigène* provides for a smaller number of tribunals than are found in British territories,² the French would claim that at all events they are not subject to the vagaries of tribal conceptions of justice. Again, the traditional authorities on whom the system of indirect rule depends are necessarily conservative; the French would contend that their system of direct administration is better fitted to make the necessary adjustment of native institutions to changing economic and social needs. In that, and in many other respects, they hold that their method is calculated to make an appeal to the *évolué* class and the educated native, for whose position the system of indirect rule, concentrating its attention mainly on tribal institutions, seems to them to show inadequate concern.

The critics of the French system address themselves in the main to two points. They are not, in the first place, prepared to accept the fundamental assumption on which the system appears to them to be based, namely, that it is to the African's own interest to pass as rapidly as possible from the use of his own institutions and his own language to a régime of French civilization and French language. They hold, again, that the operation of the system, which denies independent powers to the native authorities whom it employs, must inevitably prejudice the development of a spirit of responsibility and initiative. The first of these criticisms, however, raises more far-reaching issues than the merits of the system of direct rule as current in the French colonies. The assumption to which the critics point is an essential part of the French philosophy of rule, and the method adopted in native administration is only one of the many agencies directed to achieve the purposes which it has in view. The second point is more definitely pertinent to the present discussion. In the course of previous chapters reference has more than once been made to the opportunity which the French system affords for the abuse of authority by the chiefs and headmen.³ The report on the Cameroons for 1934 explains that the removal of the lamidos was due to their abuse of their powers, and it is not difficult to quote other evidence of the same nature. It is

¹ See Chap. XVIII, p. 1266.

² See Chap. VII, p. 291.

³ See above, pp. 585 ff.

possibly true that, as critics of the system state, if a chief brings in the requisite sum in tax revenue, builds the prescribed roads, and extends the area of cotton, coffee, or ground-nuts under cultivation in his district, his superiors are unlikely to ask in what way he has brought his powers to bear on his subjects in order to achieve these ends. But it is at the same time proper to remark, that this is not necessarily a direct consequence of the system itself; where abuse occurs, it is due to the lack of supervision by administrative officers. Abuse, as the French can with justice contend, is equally liable to occur under methods of indirect rule if supervision is inadequate. In colonies with slender financial resources and ambitious ideas of development, the use of the customary authority as government agent must equally involve the risk of the abuse of customary obligations in the interest of the achievements by which the chief knows that he will be judged. It may be that the apparent ease with which the French system of direct rule achieves its purposes makes the administration at times oblivious of the need of adequate supervision; its lack is occasionally due to shortage in the administrative staff, as in Equatorial Africa; but it must be agreed that there are other areas in which the supervision exercised is progressively reducing the opportunities for abuse.

Occasion has already been taken to remark that in the Belgian Congo there are many aspects of policy which cannot as yet be said to be fully determined; the system of native administration is, in particular, in a state of transition. The Congo government may be said to be now as fully convinced as the British that a traditional chief can render better service to the administration than one who is 'appointed'; it is not, however, as yet prepared to give the chief either the same judicial authority or the same position in local government administration as would normally be assigned to him in British territories. Like the French, the Belgians have less hesitation than the British in removing their chiefs. A striking illustration is to be found in the report to the Permanent Mandates Commission on the administration of Ruanda-Urundi for 1935, which records the dismissal of twenty-eight chiefs in Ruanda and fifty-two in Urundi.¹ Part of the reason for the unwillingness of

¹ *Rapport au Conseil de la Société des Nations au sujet du Ruanda-Urundi*, 1936, p. 73.

the Belgians to entrust their chiefs with larger executive powers is perhaps to be found in the fact that their European service of *agents*¹ is able to discharge some of the obligations which would otherwise fall on native authorities; in part also they have doubtless been affected by the fact that in the areas now under Belgian rule, with the exception of Ruanda-Urundi, they have encountered few traditional authorities who have commanded a wide measure of support among their own people.

The policy of indirect rule is now so firmly established in the British territories that areas, such for instance as the Gold Coast, which previously followed a different method in native administration, are now moving towards the adoption of institutions framed on the Nigerian model. In the form which it has now taken, the system is characteristic of the British tradition; the support given to customary institutions accords with the sentiment of a people to whose sense of trusteeship the tribal rather than the educated native makes the first appeal; all the imperial experiences of Great Britain argue in favour of a policy which affords to native peoples at once an opportunity for self-development, and the possibility of adjusting themselves, with the least possible disturbance of their own lives, to the new conditions which they now have to face. It is also important, from this point of view, that the native authority recognized is not, as in the French system, the chief in an individual capacity, but the chief and his customary council, or even, in some cases, a village or clan 'moot'.² Though, however, the principles of indirect rule are in full accord with British political sentiment, the actual development of the system has in some measure been due to fortuitous causes. The part taken by Lord Lugard in building up the system, and by Sir Donald Cameron in extending its application, has already been acknowledged.³ But it was the existence of a well-developed political organization in Buganda, and of the emirates in Northern Nigeria, constituted as Moslem principalities, which made it possible to contemplate a use of native authorities which could hardly have been envisaged if experiences had been confined to the amorphous societies of Southern Nigeria or the infirm political units of some parts of East

¹ See Chap. VI, p. 244.

³ See above, pp. 417, and 434 ff.

² See above, p. 287.

Africa. It will be realized that the most significant innovation involved by the development of indirect rule was not the grant of judicial powers to native authorities. This in effect only amounted to a systematization of the methods by which a function attached by custom to native executive authorities was exercised; the actual innovation lay in the recognition of the executive authority as a 'native administration' for the purposes of local self-government, with its own sources of revenue and a defined sphere of expenditure. The manner in which it discharges this function is the real test of the capacity of a 'native administration', and it was the success attained by some of the large organizations in this respect which encouraged the wide extension of indirect rule.

It is perhaps due to the experience gained of the working of the more important organizations that Great Britain, in pursuing its intention of developing native authorities with a wide measure of local responsibility, has given evidence of a view of African potentialities more optimistic than any held elsewhere. It recognizes, indeed, that local authorities of this type are less likely to carry out government programmes with efficiency and speed than agents selected for their qualifications and kept under close control; but it holds that this disadvantage is outweighed by the greater readiness of the governed to accept innovations which are not forced upon them. In this view it has the support of many who have made a study of African social conditions; they have been able to show in more than one case the unfortunate effects upon primitive cultures of changes forced upon them too rapidly for a satisfactory adjustment, and to point to the value of continuity with the past in social development. But it has also the support of direct experience, as for instance in the South-Eastern provinces of Nigeria, or the Northern Territories of the Gold Coast, of the value of associating traditional authorities with the introduction of changes for which it has, in other circumstances, been difficult to gain acceptance.

In spite, however, of many favourable experiences, it is clear that the scheme of indirect rule has not only its unsolved problems, but some noticeable points of weakness. It has already been pointed out that, from the administrative point of view, the traditional native authority is perhaps a less efficient agent of develop-

ment than a nominated and trained chief; it must be added that the varied responsibilities now placed on these authorities demand the exercise of close and continuous supervision by the administration. To some degree the traditional restraints against abuse of power by a chief may operate; but the system also implies the withdrawal of those summary remedies to which chiefs were liable who misused their powers or neglected their tribal obligations. However strongly government may insist that the loyalty of the people to their chiefs must be 'freely given and without external cause', the external cause is there in government support. The claims of the chiefs to tribute and service, with the irresistible force of government behind them, clearly may become oppressive, and when tribute in kind, or the crops cultivated by the subjects' labour, are convertible into cash, the chief has a strong incentive to exploit for his private ends rights which in the old economy could not be turned to any but tribal purposes. As land acquires a commercial value the authority entitled to allot it may gradually assume the position of a landlord. Again, unlike the French system, that of the British gives to the native authority an important responsibility as a judicial tribunal. It may be true generally that, as has been observed of South-Eastern Nigeria, the large number of judges and the publicity makes injustice more difficult;¹ but where there exists a native press, as in Nyasaland, the partiality of the native tribunal is a frequent subject of attack. The matter is one on which it is unsafe to generalize; it is sufficient to say here that the multiplication of native authorities, and the growing tendency to entrust to them the control of matters lying outside their traditional sphere of authority, appear to involve a need for the exercise of superintendence which is certainly not less than that required by the French system of direct rule.

There remains another question of great importance from an administrative standpoint. It may readily be admitted that the use of traditional authorities has its psychological value in facilitating the introduction of measures which might otherwise have encountered suspicion or distrust; but this need is experienced mainly at an early stage of administration. There has already arrived in some parts of Africa a stage when natives readily

¹ M. Perham, *op. cit.*, 1937, p. 244.

welcome an expansion of the health, educational, agricultural, and other social services. If in those circumstances we rely on the agency of the native administrations, we admittedly make ourselves dependent on inexperienced and inexpert bodies, whose activities, as was shown in describing the native administration in Northern Nigeria, are difficult to co-ordinate; if we make the native administrations subordinate to the central departments, we materially reduce the measure of independence which in principle they ought to enjoy. The problem thus presented is not lessened by the recognition of the fact that, if our only aim is technical progress, it can obviously be achieved most effectively by entrusting authority to centrally organized departments operating according to a comprehensive plan, as is done in French and Belgian colonies. Some of the practical aspects of this problem are now being considered by the government of Nigeria, and its decisions should prove of interest to other administrations.

The preceding observations refer to certain external aspects of the system of indirect rule; there are at the same time other difficulties which appear to be inherent in the nature of the institutions on which the system bases itself. Many observers have questioned whether the traditional native authorities, or at all events a large number of the weaker units, will not be strained beyond their powers by the tasks now laid on them. They were chosen for use as agencies of local government in order that the administration might avail itself of the influence which long-established custom had given them. But the authority which they wield, the duties they perform, the remuneration they receive, are not now those which were prescribed by custom; the greater the advance made towards the requirements of European civilization, the further do the functions of the native administrations depart from those they performed when native custom was their only law. There is, indeed, in some territories a tendency to use them as a convenient agency for carrying out functions which are not even those of local self-governing institutions, but would normally be discharged by the general administration. Everywhere the supervision exercised over them must bring home the lesson that the sanction for their authority is no longer the goodwill of their own people, but the

recognition accorded to them by the administration. There are some observers who feel that if the native authorities do not break down under the burden of the situation in which they find themselves, they can only survive at the cost of a radical alteration in their traditional character.

To feel any grave concern regarding the latter contingency would argue a failure to appreciate the real purposes of the system of indirect rule. The maintenance of native institutions is not an end in itself. They are, in any case, increasingly subject to the disintegrating influence of new economic and social forces, quite apart from any changes which action taken by the state may involve. It is even a matter of speculation whether, with the removal of the external pressures which, before the European occupation, created the need for cohesion, tribal combinations might not tend to dissolve again into their component parts, politically, as in the Gold Coast, where chiefs formerly subordinate to paramounts have been claiming independence in increasing numbers, and in a more literal sense in Central Africa, where small family groups tend to scatter and live in isolation, out of the control of any superior authority. In the long run, therefore, it may well be found that the use made of native authorities by the system of indirect rule, though it may have affected their character, will have helped to preserve their existence. If their use brings to native society the benefits which the system of indirect rule seeks to secure, the nature of the transformation to which they may be subject is of relatively minor importance. The alternative supposition, namely, that many of these authorities may break down under the burden imposed on them, is a consideration of more immediate concern. There is not at the moment sufficient material on which to judge of this possibility, for not only do many of the present authorities owe their recognition to a comparatively recent process of reorganization, but there are also many of the older native administrations which have not yet been tested in their ability to undertake social services of more than a rudimentary type. It is in the discharge of this latter function that the true test of their capacity will be found to lie. It is not unlikely that, with the growth in the demand for higher standards in the social services, the governments of some of the British territories may have to introduce some form

of direct administration in areas where the weaker native authorities have broken down.

There is a further consideration which has been much in the minds of some observers of the system. They have felt that the maintenance of indirect rule is incompatible with the growth of a large educated native population. In their view the educated African will not endure to accept orders from his inferior in civilization; he will not be content to see the government of his country in hands less qualified than his own, and he will not tolerate a judicial system that does not give the guarantees of British justice. Further, we cannot afford to neglect the material consideration that tribal institutions must necessarily afford less opportunity for the employment of educated Africans than would be found in the cadres which a direct system would maintain, and that native tribunals have no place for advocates trained in European principles of law. Just as in the West Indies a deep gulf has established itself between the educated coloured man and the labourer, so it is possible that we may see in Africa a growing breach between the educated and the tribal elements. If these apprehensions are well founded, it is clear that the growth of higher education may create an influence which will prejudice the working, and may even threaten the existence of the system of indirect rule. Here, again, we have insufficient material on which to base a forecast. At the moment, the instances where educated Africans have shown hostility are in fact most easily found in areas where indirect rule in the fully developed sense does not exist. In the Gold Coast, for example, Captain Rattray described the educated natives as feeling 'that the energy they have shown and the progress which they have made in acquiring a European education do not find a sufficient outlet in any present schemes of government based on Indirect Rule'.¹ On the other hand where, as in Uganda, Northern Nigeria, and Tanganyika, the native authorities were recognized by government while the education of Africans was still in a rudimentary stage, secondary and university education becomes available principally to the sons of men holding high positions in the native administration, and the educated class tends to become

¹ R. S. Rattray, 'Present Tendencies of African Colonial Government', *Journal of the African Society*, vol. xxxiii, no. cxxx, 1934, p. 34.

identical with the class from which native authorities are drawn. To apply another test, it does not seem that in practice there is at present any widespread reluctance on the part of those educated natives who live within the jurisdiction of native courts to resort to them: indeed, many still prefer their familiar and informal atmosphere to that of the British courts. Official opinion has always emphasized the advantages of finding a place in native administrations for representatives of the educated classes,¹ and a recent report on higher education in East Africa² suggested that in course of time it should become usual for all persons holding positions of responsibility in the East African tribes to have completed a full course at a college of university type which it is proposed to establish in Uganda. Both in the larger Yoruba states and in the small councils of the South-Eastern Provinces of Nigeria members selected for their education rather than their tribal status have been included in the councils, though they continue to form a minority. It is important, of course, to remember in this connexion that the word 'educated' covers a wide range of meanings. The members of the Nigerian Bar who now sit in the Egbe Council could not hope to find scope for their talents in a little Ibo administration. It is, indeed, likely that for many years to come the 'native administrations' will not provide an open field for the employment of educated Africans; each unit will show a strong preference for persons of its own, or from a neighbouring community.

It would be rash at this stage to attempt to pronounce a final judgement on the relative value of these different systems. In hardly any territory has the form of native authority now in existence been tested for even so long as a generation. One can do no more than speculate as to the different types of problem which they still have to face. The new relations between ruler and ruled, the efficacy of the various forms of native authority as instruments of government policy, and the reaction of this policy itself on native political institutions are among the central sociological problems which deserve to be studied in detail over as wide a field as possible.

¹ Sir D. Cameron, *op. cit.*, p. 10.

² *Report of the Commission on Higher Education in East Africa*, Colonial 142, 1937, pp. 26, 92, 110.

When analysing at an earlier stage of this chapter the form which different systems of native administration take in practice, it was thought advisable to make a separate study of the position of urban communities and of other native peoples not living under tribal conditions. The urban centres have an importance which has not always been fully appreciated by African administrations. In colonial rule the capacity of an administration to secure its purposes depends more on a general acceptance of its authority than on any sanctions it can impose; and such acceptance depends largely on the impression formed of the attitude of the ruling race by its subjects. Those impressions are not always based on the executive action of individual officers; they are influenced largely by views formed by more advanced or educated natives regarding the character of the administration, and it is largely in the towns that such experiences are formed. The influence of the urban element in the formation of public opinion will have an especial significance in French territories, where the *élite*,¹ which the government is preparing to associate with itself in the administration, will be largely urban in character. In the Belgian Congo the administration, recognizing the influence of urban centres in moulding native thought in the rural areas, aims at providing urban native communities with administrations and social organizations which will be complementary to those of the rural areas, and avoid any sharp division. The more stabilized urban communities of West Africa present, in many respects, an easier problem than the urban and industrial areas of the Rhodesias and the Union of South Africa. In the former, governments are mostly concerned with problems of control or of the development of local government; in the other cases problems are more complex and are closely related to those of labour supply.

Opposition to the growth of a native urban community is a marked feature of policy in certain African territories, particularly in the Union and Southern Rhodesia. The arguments which underlie this policy are both social and economic: it is felt that the urban native may enter into competition with the lower grades of European labour, and that his existence may create both social and political embarrassments for the white community; he breaks, in

¹ See Chap. XVIII, p. 1283.

CHAPTER X

SYSTEMS OF DIRECT TAXATION

I. INTRODUCTION

THE direct tax has an unusual importance in modern Africa. Save in certain areas under Moslem rule, a regular system of taxation was unknown before the European occupation; in many areas the tax has constituted the first step in the introduction of the native to a cash economy, and there are still parts where money is earned only to pay taxes. It has, as shown elsewhere,¹ formed at different times an important element in labour policy; the circumstances attending its collection have everywhere an important influence over the attitude of Africans towards the administration. The allocation of a share of the tax to native treasuries has its special significance in the development of the system of native administration.² The amount raised from natives by direct taxation has, again, been used by some administrations as a measure of the expenditure which should be incurred directly for their benefit.³ Though the problems incidental to the imposition of the tax among native populations will form the principal subject of this chapter, it will be convenient to preface their study by some details of the methods followed in the taxation of non-natives.

The table opposite shows the proportion represented by direct taxation in the total revenue, and the relative contribution of the different sections of the population in the territories under review for the year 1934.

II. DIRECT TAXATION OF NON-NATIVES

In the Union the collection of an income tax is governed by Act 40 of 1925 which replaces the original Act of 1917. The tax is imposed on incomes of over £400 in the case of single, and £600 in that of married, men; the maximum rate is 2s. in the £. Supertax, with a maximum of 5s. in the £, is levied on incomes over £2,500. Act 28 of 1935 introduced a rebate of 30 per cent. on the amount due both in normal and supertax. In 1933 a special tax was

¹ See Chap. XI, pp. 620 ff. and 637-9.

² See Chap. IX, pp. 421, 436 ff.

³ For example, see Chap. XVIII, p. 1213.

TABLE VI
INCIDENCE OF DIRECT TAXATION ON NATIVES AND NON-NATIVES IN 1934

Territory	Cur- rency	Total current revenue	Direct tax on non-natives		Direct tax on natives		Total direct tax		Notes
			Amount received	Incidence per head of non-native population	Amount received	Incidence per head of native population	Amount	Per cent. of total current revenue	
U. of S. Africa	£	35,630,213	10,903,310	£ s. d. 4 5 2(a)	£	£ s. d. 0 3 7	£ 11,934,020	34.4	(a) 2,750,700 non-natives including 108,900 Asiatics and 667,100 mixed and others.
S.W. Africa	£	448,347	9,642	5 8 7	139,313	4 8	138,955	50.4	(b) 3,201 non-natives include 1,401 Asiatics
Bechuanaland	£	275,581	21,100	10 14 9	22,703	7 9	43,858	42.7	(c) 37,833 "
Swaziland	£	95,248	6,939	3 6 6	45,019	7 3	41,058	42.3	(d) 27,044 "
S. Rhodesia	£	2,520,238	594,785	8 15 7	360,923	6 3	865,688	34.3	(e) 17,045 "
N. Rhodesia	£	633,108	106,595	7 11 11	108,141	6 3	212,646	33.9	(f) 11,765 "
Nyasaland	£	345,526	18,970	5 18 7(b)	129,562	1 7	148,530	43.0	(g) 3,134 "
Tanganyika	£	1,615,241	89,795	2 7 6(c)	592,119	2 5	681,914	42.3	(h) 1,034 "
Kenya	£	1,046,003	116,495	1 13 9(d)	514,480	3 5	630,971	32.5	(i) Percentage of revenue of the budgets local.
Uganda	£	1,427,235	26,551	1 11 2(e)	535,700	3 0	562,251	39.4	(j) Budgets general not included
Nigeria	£	4,350,101	32,663	6 6 7(f)	775,010	0 9	807,674	18.5	(k) 1933 figure for budgets généraux, annexes, et locaux
Br. Cameroons	£	91,885	679	2 2 6	24,993	0 8	25,582	27.8	(l) Estimate 1933.
Gold Coast	£	2,537,175	17,106	5 9 1(g)	—	—	17,106	0.7	(m) Tax on Europeans.
Br. Togoland	£	24,458	—	—	—	—	—	—	(n) 473 non-natives include 55 Asiatics.
Sierra Leone	£	547,695	28,349	14 13 3(h)	77,633	0 11	105,982	19.4	(o) 1,402 "
Gambia	£	214,807	—	—	13,638	1 5	13,638	6.3	(p) " " 534 "
A.E.F. (budgets locaux)	Fr.	67,284,046	1,185,000	fr. 264	37,208,500	11.69	38,483,600	57.2(i)	
A.O.F.	Fr.	620,073(j)	no information	—	178,100(k)	1.23(k)	178,100(k)	28.7(h)	
Fr. Cameroons	Fr.	60,757,338	238,350(l)	113	25,419,532	2.34	5,459,993	42.3	
Fr. Togoland	Fr.	28,952,072	153,703(l)	35(m)	7,062,627	9.27	7,216,330	24.9	
Belgian Congo	Fr.	345,888,095	19,764,683	1,026	80,709,434	8.60	100,474,117	28.8	
Ruanda-Urundi	Fr.	28,738,997	671,658	478(n)	10,832,810	3.29	11,504,468	39.9	

Note 1. Source of population figures. R. R. Kuczyński, *Colonial Population, 1937*; *Official Year Book of the Union of South Africa, 1934*; Southern Rhodesia, *Public Health Report, 1934*.

Note 2. *European and Asiatic taxation*. Direct taxation of non-natives is not, in the financial statements, subdivided into Asiatic and European, but the notes indicate all cases in which Asiatics form an appreciable proportion of the non-native population.

Note 3. Source of revenue figures. Statistical information supplied by Dr. C. Leubuscher.

imposed by Act 33 on the proceeds of gold-mining;¹ this tax has not been extended to South-West Africa.

Each province levies, for the purpose of the provincial budget, an addition to the normal income tax, calculated as a proportion of that due to the Union government. In the Cape this is 15 per cent. of the normal income tax for married and $22\frac{1}{2}$ per cent. for unmarried persons, and 20 per cent. of the supertax for married and 30 per cent. for unmarried persons. In Natal it is 10 per cent. of the total assessed. In the Transvaal the rate is 15 per cent. of the total for married and $22\frac{1}{2}$ per cent. for unmarried persons; in the Orange Free State 20 per cent. for married and 30 per cent. for single persons.

A personal tax on non-natives, calculated on a different basis in each province, is also imposed by the provincial councils. In the Cape the tax is graduated, rising, in the case of married persons, from 10s. on an income of £250, with an increase of 2s. 6d. for every additional £10 to a maximum of £3; for unmarried persons the minimum taxable income is £150, the minimum tax £1, and the maximum tax £5. A 30 per cent. rebate was granted in 1935, and 50 per cent. in 1936. In Natal the general rate is £1 on incomes under £450 and £2 on higher incomes; in certain circumstances persons pay only 10s. on incomes under £250. In the Transvaal there is a flat-rate tax of £1 10s. for married persons, and for unmarried persons under 25. For unmarried persons over 25 the rate is raised to £2 5s. on incomes over £100. In the Free State the minimum is £1, with an increase of 2s. for married and 3s. for unmarried persons on each £10 above £100. In Natal and the Transvaal this tax is payable by men only. In the Free State unmarried women with incomes under £100, and married women not liable to income tax, are exempt.

The income-tax system is so designed as to relieve the poorer European of taxation; in 1935-6 there were 48,538 individual taxpayers in the Union, and of these only 468 persons paid tax on incomes less than £400; they came under assessments for periods of less than twelve months. Farmers paid income tax during 1931-2 on a taxed income of only £858,233 out of the total taxed income of £58,590,992; in 1932-3 their taxed income fell

¹ Repealed in 1936 and replaced by Act 34 of 1936. See Chap. XXII, p. 1533.

to £496,727, but rose again to £717,309 in 1933-4 and £2,256,496 in 1934-5, and in 1935-6 fell again to £1,621,487. It is stated that a large number of farmers escape the income tax;¹ this is due mainly to liberal rebates for expenditure on fences, dams, water-furrows, and other farm improvements. As regards the personal tax, it will be seen that considerable numbers of Europeans escape taxation; thus, in the Cape, married persons with less than £250 income, and unmarried persons with less than £150 income, are not taxed. There is also a liberal system of exemptions. In 1931 the exemptions in the Transvaal were 14,141,² and though the numbers were less in other provinces, it is of some interest to compare the fact that the total number of natives in the Union exempted from the native tax was in 1930 only 17,528.

Income tax is levied in the High Commission territories on the same basis as in the Union. In addition a poll tax of £2 is payable by every male over 21 who is not liable to native tax. In his report on Swaziland³ Sir A. Pim suggested a land tax at an all-round rate of 1*d.* per morgen, partly as a means of bringing the large landowning companies and non-resident owners of large estates within the field of taxation. No action has as yet been taken on this proposal.

Income tax was first introduced in Southern Rhodesia by Ordinance 20 of 1918, amended in detail in later years. It is levied on incomes of £360 for single and £800 for married men, with allowances of £75 for each child or dependant. The rate since April 1935 commences at 6*d.* in the £, rising to a maximum of 3*s.* chargeable on all incomes, company and individual, over £6,500. In 1928 an Act to tax unoccupied land was introduced, and amended in 1931.

Of the British dependencies, Northern Rhodesia introduced an income tax in 1921, Nyasaland in 1921, Nigeria in 1927, and Kenya in 1937. The minimum taxable income in Northern Rhodesia is £300 for single and £720 for married men; the rate rises from 6*d.* on the first chargeable £100 to 3*s.* on every pound in excess of £1,500, while the rate of tax on companies is 4*s.*

¹ *Report of the Native Economic Committee, 1930-2*, U.G. 22, 1932, pp. 225 ff.

² *Ibid.*, pp. 224, 225.

³ *Report of the Commission on the Financial and Economic Situation of Swaziland*, Cmd. 4114, 1932, pp. 30-1.

in the pound. In Nyasaland the minimum taxable income is as in Northern Rhodesia, but the rate rises from 3*d.* and incomes of married men are exempt up to £600. In Nigeria the minimum taxable income is £30; in the colony the tax is levied both on natives and non-natives, the number of natives liable being about half the total adult male population; the incidence (in 1931-2) was about 8*s.* 6*d.* per taxpayer;¹ in the protectorate and the Cameroons, non-natives only are liable.

Northern Rhodesia, Nyasaland, Tanganyika, Kenya, Uganda, and Sierra Leone impose a poll tax on non-natives. In Northern Rhodesia the rate is £1, payable by every non-native over 21, except married women living with their husbands. In Nyasaland the non-native poll tax, introduced in 1928, is £2 levied on males over 18. In Tanganyika a poll tax was imposed in 1932 in place of an education tax of 30*s.* which was levied from 1930. It is payable by males over 18; the rates range from £2 to a maximum of £500 on incomes over £10,000. A tax of 5 per cent. on the net annual value of houses not subject to hut tax was levied from 1923 to 1936. It has been recently stated that the territory is considering the introduction of an income tax.²

In Kenya the poll tax is additional to the income tax introduced in 1937 to replace the former graduated poll tax; the rate varies from £1 to £2 payable by males over 18. Direct taxation of non-natives has had in Kenya an interesting and significant history. When, in order to meet the financial depression of 1920-1, the Kenya government raised the native poll tax to 8 rupees, the Colonial Office stipulated that the non-native tax should be increased at the same time. Hitherto, Europeans and Asiatics had paid only a poll tax of 30*s.* a year.³ An income-tax ordinance was passed in 1920, but met with passive resistance by settlers; of the estimated yield of £328,413 for 1921 only £95,073 was collected,⁴ of which by far the greater proportion was from government servants and other employed persons.

The opposition of the settlers was sustained by a number of argu-

¹ M. Perham, *Native Administration in Nigeria*, 1937, p. 263.

² League of Nations, Permanent Mandates Commission, *Minutes of 31st Session*, May-June, 1937, p. 16.

³ Non-Native Poll-Tax Ordinance, 1912.

⁴ *Report by the Financial Commissioner (Lord Moyne) on Certain Questions in Kenya*, Cmd. 4093, 1932, p. 59.

ments; only one of them, however, had any real value—it was certainly the fact that they had themselves been hard hit by the depression. This plea served to secure the abolition of the income tax in 1922, but it did not secure any equivalent concession in the native tax. Up to 1927 the non-native community continued to pay only the poll tax of 30s.; in that year a special levy of 30s. for Europeans and 20s. for Asiatics was sanctioned to cover the cost of European and Asiatic education.

The depression of 1931 again brought into discussion the question of increasing non-native taxation. A levy on official salaries was imposed in 1932; shortly afterwards the imposition of income tax was sanctioned by the home government, but the protests of the European community again succeeded in persuading the Secretary of State to withdraw it; a number of minor financial measures was substituted, some of which were from the first unremunerative. An additional poll tax was imposed in 1932, and subsequently in 1933 a graduated non-native poll tax based on income. The rates fixed were 30s. on incomes up to £100, reaching to £500 on incomes exceeding £10,000. The increase effected by this measure was not considerable; the poll tax in 1930 had brought in £43,702; it yielded £61,866 in 1932, £64,243 in 1933, and £68,307 in 1934. The levy on official salaries was bringing in sums varying in the same years between £48,188 and £53,815. The graduated tax gave a wide scope for evasion, and left out a large proportion of taxable incomes; Sir Alan Pim, while recognizing the difficulty of making a correct assessment of farming income, strongly advocated an income tax as a substitute for the various duties imposed in 1933,¹ and an Income Tax Ordinance was brought into effect from January 1, 1937. The first £700 is taxed at 1s. in the pound, the next £500 at 1s. 6d., the next £1,500 at 2s., and higher incomes at 2s. 6d. The deductions permitted are a personal allowance of £350 for residents and £150 for non-residents. There are family allowances, also special provisions to meet the conditions of agriculture. Taxation on companies is at the same rate, with a flat rate of 2s. after the chargeable income reaches £1,200. The tax was accepted by the European members

¹ *Report on the Financial Position and System of Taxation of Kenya*, Colonial 116, 1936, pp. 233 ff.

of council,¹ but a Taxpayers' Protection League has been formed to move for the repeal of the law.

In Uganda the non-native poll tax was introduced in 1919; in its present form, imposed in 1934, it applies both to males and females, with exemption for females with taxable incomes under £150. The rates are the same as in Tanganyika.

In Sierra Leone a non-native poll tax of £2 was imposed in 1931 on all non-natives over 18 except married women living with their husbands. In 1932, 1935, and 1936 the rate was raised to £4 as an exceptional measure.

The French colonies impose an income tax, similar to that paid in France, on both natives and non-natives. It is payable only on a minimum income of 15,000 francs for single persons and 20,000 francs for married; few natives qualify for payment. A scheme is under consideration for the introduction of a graduated system for the taxation of town incomes. There is also a personal tax payable by European and native citizens, the rate of which is fixed by the local administrations. In Senegal it varies from 8 to 15 francs, the same rate being imposed on French citizens, European and native, and on other natives; in the Sudan the rate for citizens is 60 francs; in the Upper Volta 30 francs; in Guinea, the Ivory Coast, and Dahomey 100 francs; in the Niger 25, and in Mauretania 50.² In Senegal this tax becomes payable by persons of both sexes at the age of 10 years; here, the obligation to furnish four days' *prestation* labour annually,³ which extends to citizens as well as to subjects, can be commuted for cash. In French Equatorial Africa a uniform personal tax of 80 francs is imposed. In the French Cameroons the personal tax, originally fixed at 25 francs, was raised to 75 in 1927. In Togo, the basic rate was raised in 1933 from 100 to 130 francs, and an additional levy was imposed on incomes over 10,000 francs, which rises from 10 francs to a maximum of 30 francs on incomes above 100,000 francs. This tax is payable also by natives with incomes above 10,000 francs. In the three communes of Senegal, in certain areas of the Cameroons, and also in Guinea, a house tax is imposed on Europeans

¹ Cf. Chap. VI, p. 169.

² A. Girault, *Principes de colonisation et de législation coloniale*, vol. ii, 1929, pp. 764-8.

³ See Chap. XI, pp. 624-6.

and natives, the rates varying between 5 and 6 per cent. of the rent. Land taxes are imposed in urban areas in Senegal, the Sudan, the Upper Volta and Dahomey, and in Equatorial Africa. These are payable by all owners of landed property on individual tenure, whether native or European. In Senegal the rate is 6 per cent. of the rental value of house property, 1-4 per cent. on the saleable value of undeveloped land; in Dahomey 3-5 per cent. on the rental value of house property, and 0.25-0.5 per cent. on the saleable value of undeveloped land.¹

The Belgian Congo introduced an income tax in 1920.² The rate is graduated from 1 per cent. to 10 per cent. of taxable income; the taxable minimum is 9,000 francs for Europeans, with an allowance of 1,500 francs for each dependant, and 3,000 francs for coloured persons, with an allowance of 500 francs for each member of a monogamous family.

It will be seen that, in certain British territories, a preference still exists for imposing a personal tax instead of the tax on income which is normal in European countries. The former has some advantage in the comparative ease with which it can be applied, particularly to Asiatics and other traders, or to Europeans of the class who keep no regular accounts. But it presents difficulties in graduation; in most cases it moves upward by arbitrary stages; and, as will have been seen, it is in some areas subject to a maximum which relieves high incomes of taxation. There is the further objection, that under a system of personal tax the commercial or industrial company practically escapes taxation. In the controversy which took place regarding the introduction of income tax in Kenya, it was urged by Europeans not only that the tax involved difficulties of assessment, particularly in the case of income derived from agriculture, but that the European community made its full contribution to the revenue of the colony through indirect taxation. There is admittedly some substance in the former argument; as regards the latter, however, it must be remembered that the customs tariff of Kenya has been designed mainly to assist producers by protective duties on the importation

¹ A. Girault, *op. cit.*, pp. 764 ff.; *Annuaire de documentation coloniale comparée*, vol. ii, 1929, pp. 233-4.

² *Codes et lois du Congo belge*, 1934, pp. 1346 ff.

of competing products and by the free import of articles necessary to their industries. In truth, neither argument is convincing, and there appears no good reason why the non-native section of the population should not everywhere make its contribution to the general revenue in the form of income tax.

III. SYSTEMS OF NATIVE TAXATION

(a) *Union of South Africa*

In the chapter dealing with labour problems reference is made to the part which the imposition of the native tax at one time bore in the labour policy of South Africa. As there shown, the tax no longer has the same significance as an incentive to wage-earning;¹ it has become a normal factor in the general native economy; but some aspects of the system have an important bearing on native policy. Up to 1925 taxation varied with each province, ranging from 12s. in the Cape to £2 in the Transvaal. With the exception of taxes from the Transkei and certain similar areas, the whole of the tax was paid into the general revenues, and there was no special allocation for native purposes. The power of imposing direct taxation was withdrawn from the provincial councils, and a unified method of taxation was introduced by the Natives Taxation and Development Act 41 of 1925. The aim of this measure was to fix the rate at a level that would provide revenues commensurate with those previously derived from native taxation, and at the same time to supply funds for the extension of native education. It was based on the principle that services for the benefit of natives must be met from native taxation; the merits of this principle will be discussed in the chapter dealing with education.² As a result, a poll tax of £1 on every male over 18 was imposed; four-fifths of this was to be paid into general revenues and the remaining one-fifth to be devoted to native education and welfare. As from April 1, 1935, this proportion was increased to two-fifths.

In addition a local tax was imposed on natives living in rural locations or reserves, except those who hold land on quit-rent tenure; this was fixed at 10s. for every hut, with a maximum of £2

¹ See Chap. XI, p. 639.

² See Chap. XVIII, pp. 1213-17.

for any individual. These revenues are paid into a Native Development Account, in which the revenues from general and local taxes are kept separate. The 'A' account, or general fund, is devoted chiefly to native education, but a portion has been expended on agricultural development, more particularly in making provision for agricultural instruction at the Fort Cox School, and on the employment of native demonstrators. The 'local' fund is expended in the areas in which it is collected, through the medium of local native councils or location boards where these exist; one of the principal objects of expenditure from this fund has been the dipping of stock.¹ The total revenue of the general fund from its inception to 1936 was £6,219,414, of which £5,687,004 was expended in grants to the provinces for native education, and £146,879 on agricultural education.² Up to the end of March 1935 a total of £1,553,890 had been paid out from the 'local' fund to native councils and location boards; expenditure from this fund on dipping-tanks totalled £455,873, and on location fencing £8,981: no grants are, however, made for the Transkeian Territories, as, under special provision of the Act of 1925,³ collections of local tax and quit-rent accrue to the Central Council; the objects on which the Council expends its funds are explained in the chapter dealing with Native Administration.⁴

Though the regulations provide that chiefs shall assist in the administration of the tax, the collection is in practice made directly by administrative officers. Native Commissioners,⁵ or magistrates, where no Native Commissioner is stationed, are charged with the duty of maintaining a register of taxpayers. Liability for tax commences at the age of 18, when a native is obliged to register in the district of domicile. He may, however, pay wherever he is, and a high proportion of the payments is made by wage-earners away from home, the native remaining on the register of the district so long as the family continues to live there. A duplicate of the tax receipt is forwarded to the district of domicile by the office which receives the tax, a procedure which frequently leads to confusion and double registration, especially as in some areas, e.g. Natal,

¹ H. Rogers, *Native Administration in the Union of South Africa*, 1933, pp. 99-107.

² *Official Year Books of the Union of South Africa*, 1928-37.

³ *Ibid.*, 1934-5, p. 997.

⁴ See Chap. IX, pp. 354-5.

⁵ Government Notice 2250 of 1928.

the native's clan name is registered as a surname, while in others, as in the Transkei, only his family name is shown. The taxpayer is expected to make payment at the office of the receiver; in extensive districts, however, especially in the Transvaal, tours are usually organized. The tax is due on January 1 in each year;¹ but later dates have been fixed in certain districts,² in order to take account of harvesting operations; in some areas action is not taken against defaulters till July 1, and till September 1 in others.

The great majority of natives pay their taxes before the final date; as regards the remainder, collection is attended with the difficulty which must always be faced in realizing a personal tax from a population characterized by a considerable degree of movement; it is this difficulty which must be held accountable for the fact that recovery is enforced so largely by criminal processes. Tax receipts, or certificates of exemption and extension, must be produced on demand to a receiver of tax, or his agent, to a European member of police, and to a recognized chief or headman; failing compliance, a native may be arrested without warrant, subject to the observance of the general instruction that this power must not be exercised when a reasonable explanation is offered. In reserves and tribal areas it is customary for a messenger to collect the tax from defaulters, who pay an additional fee of 2s. 6d., or, failing payment, to attach the defaulter's cattle. Elsewhere, the convicted tax-defaulter is usually made to pay a fine in addition to the tax; if he cannot meet the obligation, he is imprisoned, the maximum period being three months; unemployed natives who have not been exempted are invariably imprisoned. Punishment does not cancel the liability for the tax.

In view of the wages paid to natives in the mines, and in some of the secondary industries, there must be large numbers on whom the incidence of the tax is not heavy; it bears more hardly on those who are employed as labour-tenants on farms or who live in the less developed reserves. The incidence of the tax, however, is less important than certain aspects of its assessment and collection. It is an inherent feature of a flat-rate tax of this nature that it permits of no graduation between individuals, and the Union does

¹ Act 41 of 1925, sect. iii.

² Government Notice 1712 of 1931.

not attempt, as do a number of territories, to mitigate this fact by differentiating between the richer and poorer areas. Unlike an income tax, again, there is no automatic relief for the individual who by reason of physical or other incapacity can earn no income; exemption may be granted on the grounds of age, chronic disease, or other causes of incapacity; some considerable measure of relief was effected by Act 49 of 1935 which exempted all natives over 65, but in other respects the grant of exemption depends on the discretion of the magistrate. The Native Economic Commission of 1930-2 showed that, in 1930, 17,528 natives were exempted from the tax, of whom 9,931 were exempted on grounds of indigency; the relative figures of Europeans exempted on various grounds from the personal tax¹ would seem to show that there is some lack of liberality in applying the rule to natives. Part of the difficulty thus arising is no doubt met by the strength of the Bantu family custom, which accepts collective responsibility for the tax on individual members; but that custom must be of declining force in the conditions of industrial and urban life.

Even more noticeable, however, is the use to which the tax receipt is put for what may be described as police purposes. It is a provision peculiar to the Union that, in areas proclaimed for the purpose, failure to produce the tax receipt is in itself an offence for which natives may be arrested without warrant. This provision is freely used, particularly in the Transvaal; the police not only stop and question individuals, but raid houses for persons who do not possess their tax receipts. The power seems also to be used for purposes which have little reference to the payment of tax. At the 1936 meeting of the Transkeian Territories General Council a magistrate referred to two such cases; in one a meeting of an African nationalist movement was broken up and forty-nine persons arrested for failing to produce tax-receipts; in the other a chief complained of the unauthorized settlement of strangers on his land, and 149 were arrested under the Taxation Act. The system no doubt has a convenience for certain administrative purposes; but the results could be attained in a more normal manner by a specific provision in the criminal law, which would avoid the prejudice against the administration which must be created by the

¹ See above, p. 549.

use of fiscal provisions for police purposes. The result of the rigidity with which the tax is collected and of the use of the receipt for police purposes is seen in the number of convictions under the Native Taxation Act; they numbered no less than 68,915 in 1935. The manner in which the tax is administered, rather than the tax itself, makes an unusual and perhaps unnecessary addition to the amount of 'statutory offences' committed by natives.

(b) *South-West Africa*

In South-West Africa no general flat-rate tax has yet been imposed, and the basis of native taxation is the imposition of grazing fees, which are charged at different rates on Crown land and in reserves. A dog tax is levied on natives and Europeans alike. The revenues received from natives in reserves are credited to the reserve funds. The South-West Africa Commission of 1936 reported that the Herero had expressed a preference for a uniform poll tax in place of the grazing fees; the Commission, however, were opposed to this, their ground presumably being that the grazing fee allowed of a more effective discrimination between rich and poor. It is noticeable that the Commission also stated that 'the Legislative Assembly has been disinclined to be liberal with appropriations for services peculiarly in the interests of the natives', on the ground that 'it would be inequitable further to tax the European for services conceived entirely in the interests of the natives, who hardly contribute to the revenue at all'.¹ They recommended an increase in native taxation; they did not, however, commit themselves as to the form which this should take.

(c) *Basutoland*

Each of the three High Commission Territories has its own system of native taxation. The declaration of British rule over Basutoland in 1869 was followed in 1870 by the imposition of a hut tax of 10s., payable in cash, grain, or stock. An increase to £1 imposed by the Cape government in 1880 was one of the causes leading to the Gun War of that year, and the old rate was restored on the assumption of direct control by Great Britain in 1884. In

¹ *Report of the South-West Africa Commission*, U.G. 26, 1936, para. 384.

1898 the rate was again raised to £1, in order to enable the territory to dispense with the annual contribution of £20,000 from the Cape government, which had been agreed upon as part of the settlement of 1883. The raising of the tax to £1 in 1898 was with the general consent of the Basutos, as they were very anxious to be independent of the Cape. In 1911 a poll tax was substituted for the hut tax, thus for the first time extending taxation to unmarried men. The principle of the hut tax was retained by the imposition of an additional £1 for every plural wife, but the maximum was fixed at £3. The basic tax was increased by 5s. in 1920, and an additional levy of 3s. for educational purposes was imposed in 1926, making the minimum tax £1 8s. The age at which tax becomes payable is 21, except in the case of contract or voluntary labourers proceeding to work in the mines, who are liable to pay at the age of 18.

The chiefs are, in principle, responsible for collecting tax, and up to 1899 they appear to have carried out this responsibility without assistance from the British officers. With the increase in the tax difficulties arose, and the administration assumed a direct share in collections; the function of the chiefs is now limited to rendering such assistance as is required by the administration. Tax registers were introduced in 1911-12, but inefficiently kept, and receipts were rarely issued. In 1928 collectors were appointed; they make intensive collections, with the assistance of the police, during the second half of each year. Of the total collected, 5 per cent. is returned to the chiefs and their messengers: the collectors receive a share of this, but it has been asserted that the actual work continues to be done by village headmen. The paid collectors are responsible for the maintenance of the registers, which are not checked by any superior authority; that the receipts never approach the amount which is indicated as due by the registers is accounted for, in part at least, by failure to remove the names of dead persons. Sir Alan Pim¹ considered that if there is to be any attempt to arrive at a system of real indirect rule, a return to the system of collection through chiefs, under strict supervision, is desirable as a first step towards a native treasury; he has recom-

¹ *Report on the Financial and Economic Position of Basutoland*, Cmd. 4907, 1935, pp. 57-8.

mended a periodical check of the registers by assistant commissioners—a practice which, in his view, has the further advantage of bringing the European official into closer touch with native life.

(d) *Bechuanaland Protectorate*

In Bechuanaland the poll tax was fixed at 10s. in 1899 and raised to £1 in 1909. In 1919 a levy of 3s. on every hut was imposed in order to constitute a native fund, and the contribution for this purpose was raised to 5s. in 1930. In 1932 this levy was amalgamated with the general tax, which thus became 25s. for each adult male, with an additional 25s. for each wife in excess of one, up to a maximum of £3 15s. In 1933 the rate was reduced to 15s. with 15s. for each plural wife and a maximum of £2 5s., the payment of 5s. per tax to the native fund being maintained. The tax becomes due at the age of 18. It may be paid in cash or in kind; contributions of grain are used directly by the administration, while cattle and other goods are sold to traders. In Ngami-land in 1933, 75 per cent. of the collections were made in kind.

The chiefs have a more definite position in the collection of the tax than in Basutoland. They stipulated from the first that the collection of the tax should be left in their hands,¹ and they attach equal importance to this position to-day. Their execution of this duty, however, has been open to criticism. Collectors appointed by them maintain the registers and organize the collection through subordinate chiefs and headmen; the chiefs receive a commission of 10 per cent. on collections made before the end of October, and 5 per cent. on those made after that date. In each year since 1933-4 it has been found necessary to double the rate of commission. Magistrates keep a copy of the registers, scrutinize the collections, and provide police to deal with defaulters, but do not check the lists, which are clearly defective. A special check made in the Bamangwato Reserve resulted in the striking off of some thousands of names. In the Batawana and Bakwena Reserves the magistrates in 1928 assumed responsibility for the collections, in the former case on the discovery of embezzlements by the head collector, in the latter on the deposition of the chief for inefficiency; in the Batawana Reserve further embezzlements in 1931 led to the

¹ See Chap. IX, p. 407.

appointment of the European police as head collectors. The chiefs, however, continue to receive their commission and to be responsible for the registers. Sir Alan Pim recommended the restoration of responsibility to the chiefs under stricter supervision, on the ground that the exercise of financial powers is an essential function of a modern native authority, and that it would be difficult to make effective a system of collection to which the chiefs were opposed.

It is clear, however, that the present system of assessment and collection by chiefs, though it may help to maintain their traditional authority and may perhaps be more acceptable to many members of the tribes, is in other ways far from effective. It may be assumed that with the introduction of the more systematized form of native administration, to which reference has been made,¹ the tax system will also be regularized. It is of even more importance to note that in the special conditions of Bechuanaland the incidence of the tax is at times severely felt. It was calculated that as the result of the economic depression there would be 10,000 taxpayers in default in 1933; and though the rate of the tax was, as already explained, reduced in that year, it is necessary to recognize the special need for elasticity in collection of the tax in Bechuanaland.

(e) Swaziland

In Swaziland the rate of taxation is higher than that of the other High Commission territories or the Union. It is 35s. for every adult male, single or with one wife. A man with more than one wife pays 30s., with 30s. for each additional wife up to a maximum of £4 10s. This includes a levy of 2s. per head for the Swazi National Fund.² There is also a dog tax of 5s. per dog. Here the great difficulty in collection is the prolonged absence in employment outside the territory of a large proportion of registered taxpayers. Collection is made by the administrative officials at camps to which the natives are summoned. Native chiefs and headmen are responsible for bringing in defaulters.

The problem of the collection of tax from absentees constantly presents itself in all these territories, dependent as they are economically on the export of labour to the Union. The Bechuanaland

¹ See Chap. IX, p. 409.

² For the Swazi National Fund, see Chap. IX, p. 402.

chiefs and their collectors formerly spent a considerable time in Johannesburg for this purpose. In 1932 the Basutoland government opened a tax office in Johannesburg, and in 1933 its scope was extended to include Bechuanaland and Swaziland; it appears to have justified its existence as a revenue-collecting agency.¹ Recruiting organizations which engage labourers for the mines pay on their account one year's tax which is subsequently deducted from their wages, but in the case of labour outside the Rand which is not obtained through an agency, no provision exists for the collection of tax in the Union.

(f) *Southern Rhodesia*

In Southern Rhodesia there is a poll tax of £1 for every adult male with an additional 10s. for each wife in excess of one.² Exemptions are granted by the District Commissioner to persons prevented from working by 'age, chronic disease, or other sufficient cause'. There is a tax of 5s. on dogs, of general application, which brings in more revenue from the native than the European population. The law provides that, as an alternative to fine or imprisonment, a tax defaulter may enter an approved contract of service, and have the amount of the tax deducted from his wages; it is estimated that it requires at least two months' work to earn the necessary tax. This provision does not seem to be applied in practice, and up till 1934 the normal course was to send defaulters to prison; in that year convictions for non-payment of tax numbered 8,595. In 1935 the government instituted detention camps in the reserves in order to segregate natives convicted of minor and statutory offences from habitual criminals. Tax defaulters sentenced to a period at these camps are usually set to work on roads in native reserves, the amount of the tax being debited to the reserve fund. The extent of the annual arrears, which were £58,830 in 1933-4 and £58,612 in 1934-5, and which involve annually a considerable write-off, seem to indicate the need for a re-examination of the present system, both in regard to the territorial graduation of the tax and the method of collection.

¹ *Report*, op. cit., Cmd. 4907, 1935, p. 58, para. 92.

² Ordinance 21 of 1904, amended by subsequent Ordinances in 1916, 1920, 1924, and 1926; and Government Notice 698 of 1928.

(g) Northern Rhodesia

In the British East African Territories the characteristic form of taxation is a poll tax or hut and poll tax, which is graduated in the sense that the rate is varied from district to district. In Northern Rhodesia a poll tax is levied on every male over 18. Up to 1911 different systems were in force in north-western and north-eastern Rhodesia, the former having a poll tax of 10s., with an additional 10s. on plural wives, the latter a hut tax of 3s. After 1914 the poll-tax system was extended throughout the country and the rate in the north-eastern districts was gradually increased. In 1929 the plural wives tax was abolished, but the rate was increased by 2s. 6d. in all cases, giving a rate of 12s. 6d. in the north-western districts other than Balovale, where it was 7s. 6d., and 10s. in the north-eastern districts. Taking the proportion of recoveries as a criterion of the incidence of the tax, it may be noted that in 1929 the average collection was 60 per cent. of the total demand in the native areas, while in the settled districts it was over 80 per cent., and in one district 95 per cent. With the economic depression, however, this percentage fell sharply. In 1932 only 47 per cent. of the persons liable paid. In 1933 the percentage from three Barotse districts was only 8.9 in Mankoya, 17.5 in Senanga, and 15 per cent. in Lealui; these percentages, however, improved slightly in 1934. The total arrears outstanding were £146,132 in 1933, of which £56,017 were due from Barotseland, and £189,089 in 1934.

Largely as the result of the difficulty experienced in recovery of the tax in the depression period, a revision of the system was undertaken towards the end of 1934, the rate being reduced in most districts, but it remained at 12s. 6d. in the northern urban and native areas on the railway line, and was increased to 15s. at the three larger coppermines. Since it was regarded as inequitable that natives working in identical conditions should be taxed at different rates according to their place of origin, those who had already paid tax at a lower rate were required to pay the difference if resident for more than one month in an area assessed at a higher rate. The principle may have been equitable, but the decision had the effect of doubling the original tax for persons normally resident

in an area at a low rate of assessment; and the circumstances in which it was announced to workers in the mines was undoubtedly one of the principal causes of the rioting which broke out in the copperbelt in 1935. The incident seems to illustrate the difficulty of devising a system of taxation appropriate to the circumstances of populations dependent upon migratory labour. The rate of 12s. 6d. was estimated in 1935 to represent as much as three months' effort, many natives spending a considerable time in travelling from outlying districts to places of work, and it must be remembered that it is still a common practice for a man to earn one or more relatives' taxes as well as his own. From 1935, therefore, the rate of tax was reduced to 7s. 6d. for all districts away from the line except Fort Jameson, and for that district also in 1937. In the three central districts (Livingstone, Broken Hill, and Ndola) it remained at 12s. 6d., but in the other districts of the railway belt it was fixed at 10s., except at the mines, where it was 15s. It has been pointed out that the increased rate in the mining areas might well be offset by the reduction in the amount that had to be earned on account of relatives living at home.¹

The annual report for 1936 considers the percentage of current taxes paid in many districts encouraging, being from 84 to 87 per cent. in various districts, though in one (Balovale), only 3 per cent., partly owing to political disturbances. Some further experience of the working of the tax in normal conditions would seem to be required before it is possible to decide on its real incidence. There are few opportunities of earning money in Northern Rhodesia, save in the coppermines, and some 40 per cent. of the taxable population leaves the country in search of employment. In certain parts of the territory the exodus of males is a conspicuous and recurring feature. In spite, therefore, of the fact that the tax is lower than in Southern Rhodesia, it would seem to have a more marked effect on native life, and it was recommended in 1938 by Sir Alan Pim, who considers that rates are still too high in outlying districts, that, failing the introduction of an alternative system, a reduction in receipts will have to be accepted. The system which he recommends is a general minimum tax plus a

¹ *Report on the Disturbances in the Copperbelt, Northern Rhodesia*, Cmd. 5009, 1935, pp. 5, 7.

percentage of wages above a fixed rate.¹ The government has declared its intention of considering the introduction of a more equitable system.

The law provides that the tax may be paid in kind, but not in labour. The punishment for default is, since 1934, one month's imprisonment, or, in the case of persistent offenders, six weeks; the District Officer may grant exemptions to natives unable to pay for economic reasons; since 1935 provision has been made through a Native Tax Relief Grant for programmes of public works in which natives who cannot raise the necessary cash by other means are allowed to earn the amount of the tax. In 1935 the value of relief work done was £18,328, and in 1936 £12,744; the estimated expenditure under this head was £10,000 in 1936 and £7,000 in 1937. In its first year it was said to have resulted in the collection of considerable arrears in cash, the natives preferring payment to work; in 1936, however, it was reported from Barotseland that there was a tendency for taxpayers to fall into default deliberately, so as to defray their obligations by the easy course of tax-relief labour. The number of defaulters committed to prison was 1,951 in 1936 against 6,080 in 1934, and in that year a circular was issued which greatly tightened the procedure in tax-default cases. Nevertheless the prevention of deliberate default has become increasingly difficult.²

Under the rule of the British South Africa Company the assistance of chiefs and headmen was enlisted in collecting tax and arresting defaulters; at a later date collections were made by clerks or messengers in the direct service of the government, and it is noteworthy that the same complaints of arbitrary action that have been used elsewhere as an argument against the employment of native authorities for this purpose have been brought against the native officials. Since it is clearly impracticable for the actual work of collection to be done by European personnel, it would seem to follow that the essential factor in the prevention of abuse is the degree of supervision exercised rather than the status of the native agent employed.

¹ *Report on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, pp. 127-8.

² *Ibid.*, pp. 123-4.

(h) Nyasaland

In Nyasaland the hut and poll tax¹ is relatively low, being at a flat rate of 6s. imposed upon males over 16; unmarried men are covered by the poll, married men by the hut tax. A hut tax is payable on account of any wife in excess of one, whether or not she occupies a separate hut: it is also payable by any adult unmarried woman who owns a hut. For taxes not paid before September 30, the rate is raised to 9s. Payment may, by special authorization of the Governor, be made in instalments or in kind. The Emigrant Labour Committee² drew attention to the difficulties which arise from accepting payment in kind if there is no organization for the disposal of the produce accepted. The penalty for default is imprisonment up to six months, and the forfeiture of the hut. Exemptions are given to widows and persons prevented from raising the tax by age, disease, or infirmity. Nyasaland makes the same provision as Southern Rhodesia for the payment of tax by deduction from wages earned under an approved contract. In practice available employment, for example on road work with the Public Works Department, is indicated to defaulters, and judgement is 'suspended' and cancelled if the tax is paid. Statistics are not published which would show the number of criminal cases in the territory as a whole. A tax-relief grant similar to that described in Northern Rhodesia was made in 1935; but only £3,601 was spent out of an estimate of £6,377. Only persistent defaulters are imprisoned.

The tax here is considered to be equivalent to about one month's wage, but the burden is relatively heavy in the undeveloped Northern Province, owing to the absence of local employment, and this was regarded by the Emigrant Labour Committee of 1935³ as one of the principal causes of the exodus of young men from the territory.⁴ The Committee noted that it has become a point of honour with the wives of absent husbands to pay the tax due on their behalf rather than admit that the husband has ceased to send any money home, and they are driven in some cases to

¹ *Laws*, cap. 52.

² *Report of the Committee appointed to enquire into Emigrant Labour*, 1935, p. 20.

³ *Ibid.*, pp. 17 ff.

⁴ For this exodus see Chap. XI, pp. 701-2 and 707.

illicit brewing and prostitution.¹ It recommended the abolition of the hut tax and the substitution of a graduated poll tax based on the relative opportunities of earning money in different districts: the graduation was to include the imposition of higher rates on Nyasaland natives employed in other territories, the rates suggested being 15s. in Southern Rhodesia and £1 in South Africa.² A further inquiry in 1937³ repeated the proposal for a graduated poll tax, the basic rate to be 8s. It also recommended that the native authorities be allowed to levy additional local rates in the more prosperous districts, and that the Governor be given power to reduce the basic rate to any level in the poorer districts. Ordinance 26 of 1936 provides for the exemption from local taxation of Nyasaland natives who have paid tax elsewhere, subject to reciprocity on the part of the territories concerned.

It appears to have been hoped that with the introduction of the system of indirect rule the native authorities would take an active part in the collection of tax. The powers given to the native courts, on their institution in 1933-4, included competence to decide cases under the Native Hut and Poll Tax Ordinance; but these were abrogated in 1935, as it was considered inequitable to convey any impression that the native authorities were government servants and were responsible for the actual collection of the tax. It is impressed upon these authorities, however, that it is in their own interest to supply information regarding defaulters, and to ensure that their people discharge their tax liability. Native treasuries do not receive a proportion of the tax for general purposes; the 6d. rebate given on each tax is earmarked for the payment of salaries to native authorities.

(i) *Tanganyika*

In Tanganyika the German administration introduced a hut and poll tax in 1897, the first payments for which were made in kind; when the circulation of money became general, the rate was fixed at 1 rupee, and raised in 1905 to 3 rupees. In 1912 the tax was converted into a poll tax of the same rate; this tax was continued by the mandatory government until 1922, when hut and

¹ *Report*, op. cit., 1935, pp. 33-4.

² *Ibid.*, p. 48.

³ E. Smith, *Report on the Direct Taxation of Natives*, 1937, pp. 10, 28.

poll tax was imposed; the poll tax was payable by men over 16 who were not liable for hut tax.

A new system was introduced in 1935.¹ A community tax, assessed on the group as a whole, is imposed on two tribes, the Masai and Barabaig cattle nomads, among whom the patriarchal family head had been held responsible in practice for procuring the sum due from the taxpayers of his family. Where this is not levied a house tax is imposed. The definition of 'house' under the ordinance represents an important innovation. It may include any number of huts grouped together in such a way as to constitute the dwelling of one family. The house tax thus ceases to discourage the building of separate huts where a family cannot live in one hut without unhealthy overcrowding.² Where a man has more than one dwelling, as is the case where a man has two wives in two different villages, he must pay house tax in respect of each dwelling. In such a case no 'plural wife' tax is levied. If, on the other hand, a man has more than one wife living in one dwelling, every wife after the first is taxed at a rate which is in most parts of the country half the house-tax rate, but in a few districts for special reasons is equal to the house tax. Provision is made for the exemption by government order of any person, class, or tribal or territorial unit. Students, for instance, are so exempt.³ Individuals may be granted permanent or temporary exemption by administrative officers on grounds of age and infirmity. The ordinance provides for the discharge of the tax obligation by labour on public works, but this provision applies only to males under 45 years of age. The penalty for refusal to accept such labour is three months' imprisonment. The rate of tax varies from district to district, and with a view to avoiding injustice may be varied for different classes of natives in one district. Thus at Arusha alien natives are taxed differently from Arusha natives, and in the Lake Province migratory Congo natives benefit from a considerable reduction. The rate is fixed annually. In 1937 rates in rural areas varied from 4s. to 15s.,⁴ and in townships from 7s. to 20s.⁵ This is estimated as equal to one month's wages.

¹ Native Tax Ordinance 20 of 1934.

³ Government Notice 174 of 1935.

⁵ Government Notice 185 of 1936.

² See Chap. XVII.

⁴ Government Notice 169 of 1936.

The system of indirect rule is here held to imply the responsibility of the native authorities for the collection of the revenues both of the native treasuries and of the central government; the native treasuries are financed by a rebate, the amount of which varies in different cases; the total paid to native administrations is between 20 and 25 per cent. of the revenue from native taxation.¹ The native authorities are subject, however, to strict supervision; remittances must be made at least fortnightly and tax books taken to the district offices for checking at the end of every month. In areas not falling within the jurisdiction of any native authority, the tax is collected by headmen and paid collectors. The assessment and compilation of the registers is the duty of District Officers. The practice has been to rely on lists of names furnished by native authorities, but house-to-house assessments are sometimes made. The estimated total number of taxpayers is 1,539,000 and the maximum collection appears to have been made in 1929-30, when 1,527,000 taxes were paid, including some 25,000 arrear payments. The collections reacted sharply to the depression period; in 1930-1 the figure was 1,433,000; in 1931-2 it fell to 1,132,000 and in 1932-3 rose again to 1,184,000. The extent of intervention by District Officers in the process of tax collection varies with the circumstances of the district; there is always a certain measure of action on their part; in the depression period it largely increased in some districts, a fact which cannot have failed to prejudice the relations which should exist between the District Officer and the people.

There has been an interesting development in the effort to facilitate the payment of the tax by instalments. In some areas cards are issued to which stamps may be affixed, a completed card being exchanged for a tax receipt. This has been found satisfactory in the case of natives working for regular wages; but the opinion has been expressed that in the purely native districts it will tend to reduce collection through the difficulty of insisting on full payment if once a partial payment has been accepted. In Bukoba in 1936 rules were issued permitting the payment of tax in two instalments only.

In many respects Tanganyika is distinguished by efforts made to adjust the burden of the direct tax; but it has not been able to

¹ See Chap. IX, pp. 439-40.

remove some of the difficulties which are inherent in the nature of the tax itself. The house tax appears to correspond roughly with differences in wealth; but the plural wives tax is not only exceedingly unpopular: in some cases it results in taxing what are liabilities rather than assets. There appears to be no recognized system of granting exceptions in periods of climatic or other vicissitudes. An interesting proposal has been made for the imposition, in areas proclaimed for the purpose, of a graduated personal tax on taxable wealth;¹ this is to be assessed on the profits of any trade or employment and the value of livestock, the amount represented by obligations to dependants under tribal custom, as estimated by the native authority, being deducted. This tax has not yet been levied; doubts have been expressed as to the desirability of leaving the assessment to the native authorities, and the method of calculation to be adopted has not yet been worked out in detail.

(j) *Kenya*

In Kenya the Hut Tax Regulations of 1901 imposed a tax of 2 rupees, raised in 1902 to 3 rupees, and the Hut Tax Ordinance of 1903 allowed variations of the amount of tax with a maximum of 3 rupees; it was described as payable in cash, kind, or labour. The Commissioner was empowered to direct that, where two or more adults lived in one hut, each additional adult should pay an amount equivalent to the hut tax, and this was done in the Coast Province in 1905 and in the Kikuyu area in 1908. The combined hut and poll tax was applied throughout the territory by Ordinance 2 of 1910, which imposed a tax of 3 rupees on every hut, payable by the owner, and a poll tax of 3 rupees on every male over 16 not liable for hut tax; the aim of the latter was to encourage young men to seek employment. The tax was raised in 1915 to 5 rupees, with certain exceptions, including the Masai, who continued to pay the old rate. In 1920 the maximum was raised to 10 rupees and this rate was imposed on the Masai, who from this time onwards have been assessed at a higher rate than the other tribes on account of their potential wealth in stock. The general rate was fixed at 8 rupees, but lower rates were imposed on certain

¹ Native Tax Ordinance 20 of 1934, sect. vii.

districts, with a minimum of 5 rupees. After the introduction of the shilling currency in 1922 the general rate was fixed at 12s., that for the Masai remaining at 20s., the equivalent of 10 rupees at the rate fixed at that time. In the years of the economic depression these taxes were recognized as constituting a very heavy burden, and on various occasions taxation was reduced or remitted in the case of tribes which were particularly hard hit. The standard rate has also been modified to meet local conditions. Lower rates, varying from 10s. to 3s., were imposed in 1935 in twenty areas. The local rate imposed by the native councils,¹ which varies from 1s. to 2s., is additional to this tax; it is payable only by residents in reserves.

The Native Hut and Poll Tax Ordinance 40 of 1934 increased the provision for the exemption of impoverished persons by making lack of means, apart from infirmity, a sufficient ground of exemption; it also provided, however, that women hut-owners should pay tax, if financially able to do so. The card instalment system on the lines adopted in Tanganyika was introduced in 1936, and has not so far met with the same criticism; it is held that it protects the native from the exploitation to which he was liable when the whole sum had to be raised at once. A proposal has been made that payment by the stamp system should be obligatory on natives in employment; it is claimed that this will automatically bring in a large proportion of the total native tax, while the employer will be free from the risk of losing his labourers owing to prosecutions for tax default. It will, however, be necessary to regulate the system in such a way that the employer does not become responsible for paying the tax by deduction from wages, a procedure which has generally been rejected in the British colonies as liable to abuse. It would appear that the proportion of exemptions granted in different districts varies more widely than can be explained by differences in economic circumstances; it is as high as 27 per cent. in Kavirondo, and as low as 5 per cent. in Kikuyu.

The original Hut and Poll Tax Ordinance provided that defaulters might be made to work on public works, one month's labour being taken as the equivalent of 3 rupees. This provision

¹ See Chap. IX, p. 391.

was little used, and was deleted in 1921 on the ground that its application might be regarded as a resort to forced labour. There is now no organized system of defaulters' labour; the penalty for contumacious refusal to pay is imprisonment, but the ordinary defaulter is sentenced to from one to three months in a detention camp, in which there is usually no organized work. In 1935 some 175 persons were sentenced to imprisonment and 8,791 to detention camps for offences under the Hut and Poll Tax Ordinance. The employment of detainees on road work was recommended by a local commission in 1936.¹ The commissioners who reported on native taxation in the same year² advised that the liability for payment should not be extinguished by a sentence of imprisonment, and that the rate should be raised by 2s. on payments made after July 31. It has been calculated that the sum of £550,000 represents a fair annual native contribution to direct taxation.³ Revenues from this source exceeded this sum in 1926-8 and 1930, the latter being the peak year with a total collection of £591,424. After a decline to £515,277 in 1932, it rose in 1933 to £557,796 and then dropped to £514,480 in 1934 and £502,302 in 1935.

Under the procedure in force up to 1934, registers were prepared annually. The Report of 1936⁴ pointed to many deficiencies in the procedure followed, and recommended a closer co-ordination between the system of registration for native control and the tax census. Tax was collected on a fixed date by the District Officer at the local native authority head-quarters; lists of defaulters were sent to the native authorities, who dealt with them with the assistance of their own retainers or tribal police.

In 1934 a beginning was made of entrusting collection to selected chiefs and headmen.⁵ Alleged abuses by these authorities were the subject of inquiry by the local commission, already referred to, appointed in 1936. It was pointed out that the native authorities with their low salaries cannot pay their retainers sufficient to overcome the temptation to corruption; there was held to be good ground for revising the salaries of headmen

¹ *Report of the Commission upon Allegations of Abuse and Hardships in the Collection of Non-Native Poll Tax and Native Hut and Poll Tax*, 1936, p. 17.

² G. Walsh and H. R. Montgomery, *Report on Native Taxation*, 1936, pp. 40, 47.

³ *Ibid.*, p. 23.

⁴ *Ibid.*, pp. 45-6.

⁵ See Chap. IX, p. 388.

entrusted with tax collection, and for giving them the assistance of uniformed tribal police paid by the government. As regards exemptions, the Report on Native Taxation¹ recommends the appointment each year of committees of elders to consider applications for exemption, thus making the District Officer less dependent on the advice of the headmen; it has also been represented that there is considerable hardship in requiring persons exempted on account of age or infirmity to make a fresh application each year, but a more reliable system would clearly be necessary if permanent exemptions were to be granted. Sir Alan Pim² supported the commission in its further recommendation for the appointment of special tax officers, engaged as members of the local civil service, who would be responsible for the actual work of receiving taxes, leaving to the administrative officer the function of general supervision; this would have the further advantage that the administration of justice and the collection of tax would not be in the hands of the same European authority. The arrangement proposed appears to be regarded as a temporary system, which will gradually give place to one in which the native authorities are entrusted with the collections, subject to adequate supervision by the administration; it is noteworthy that the local commission, differing from official opinion in Nyasaland, recommended that tax-default cases should be heard by native courts.

The possibility of following the example of Tanganyika in raising the age of liability for poll tax from 16 to 18 has been under discussion for some years. Lord Moyne, in the course of his inquiry made in 1932 into the finances of the colony, advised against a change on the ground, among others, that the territory could not afford a loss of revenue which he estimated at £40,000.³ The 1936 Report on Native Taxation also holds that the payment of taxes should be considered as an obligation inherent in adult membership of the tribe, which is recognized at 16.⁴ Sir Alan Pim, however, considered that the case for alteration was strengthened by the action of Tanganyika, and that the loss to

¹ G. Walsh and H. R. Montgomery, *op. cit.*, p. 48.

² *Report*, *op. cit.*, Colonial 116, 1936, pp. 98-9.

³ *Report*, *op. cit.*, Cmd. 4093, 1932, pp. 7-8.

⁴ G. Walsh and H. R. Montgomery, *op. cit.*, p. 49.

revenue would not be more than £20,000.¹ The Chief Native Commissioner's estimate was £25,000. The Standing Finance Committee in 1937 agreed that it did not appear practicable to defer any longer the taking of this step.

The possibility of injustice from the imposition of the hut tax on women was discussed by Lord Moyne, who rejected the proposal that no tax should be levied on huts occupied by widows, but recommended that a distinction should be made between widows capable of bearing children and those past child-bearing age. But it is clear that an exemption from hut tax in the case of women too old to be an economic asset would be unfair in its incidence unless it applied to wives as well as to inherited widows. Sir Alan Pim recommended that the additional hut tax should be fixed at half the basic rate, as it is in Tanganyika.² The local commission of 1936 recommended also that independent women hut-owners should pay the lower rate;³ the proposal was considered by the Standing Finance Committee in 1937 but postponed. It has also been proposed that the hut tax should be abolished altogether, and replaced by a higher poll tax,⁴ a measure which would certainly be free from such anomalies as arise from the assumption that the number of huts is necessarily an index of wealth, but would involve the abandonment of any principle of taxation in accordance with capacity.

Lord Moyne's proposal for the introduction of a graduated tax will be discussed later in connexion with proposals of this kind made in other territories. Another scheme for the reorganization of the Kenya system of taxation, which does not, however, provide for any graduation in accordance with individual wealth, is that two main taxes should be imposed on the native community, a poll tax payable to central revenues, to be devoted to the general cost of administration, and a local rate to be assessed and levied by native councils to meet the cost of all special services for which the councils would then assume responsibility. This scheme would provide for local reductions in rates and would make possible the establishment of native treasuries with substantial funds; the local

¹ *Report*, op. cit., Colonial 116, 1936, p. 37.

² *Ibid.*, pp. 38-9.

³ G. Walsh and H. R. Montgomery, op. cit., p. 36.

⁴ *Ibid.*, p. 25; *Report of the Commission upon Allegations of Abuse, &c.*, op. cit., pp. 14-18.

commission of 1936, however, considered that the difficulty of finding a basis of assessment for the local rate would make this system impracticable.¹

(k) *Uganda*

In Uganda the direct tax presents one unusual feature; it was, so far at least as Buganda is concerned, introduced by agreement. Article 13 of the Agreement of 1900 fixed the hut tax at 3 rupees or 4s.; this was changed to a poll tax and increased to 10s. in an agreement of 1910, and again raised to a maximum of 15s. in an agreement of 1920.² In the territory generally, discrimination is applied as between different districts, 10s. and 5s. being levied in the poorer areas. The native authorities are responsible for the keeping of registers and the collection of tax, exemptions being granted by the District Commissioner. The poll tax rebate payable to native treasuries is normally 20 per cent.; in Lango District and the Eastern Province it is 10 per cent.; in Bunyoro 30 per cent.

Though there is no tax on plural wives, there are other demands on the native which materially raise the incidence of taxation. The Buganda landlords have in virtue of their quasi-freehold tenure³ the right to take from tenants a rent fixed by law at 10s.; a land tax is levied by the native government on owners of more than 10 acres of land. The rate is 5s. for any landlord with fewer than five tenants; for others, 15s. or 25s. according to the district. In addition 1s. 6d. out of every rent payment is payable to the native treasury, and is in fact collected by their agents from the tenants, who themselves deduct it from the rent payable to the landlord.

Outside Buganda occupiers of land do not pay rent, but tribute ranging from 1s. to 7s., known as *busulu*, is collected for the purposes of the native administration; the maximum rate payable in combined poll tax and *busulu* is 21s. in Busoga.

A further obligation to which the male native population of the whole protectorate is liable is the provision of thirty days' unpaid labour on public works (*luwalo*) at the order of the native authorities. The obligation to maintain the roads was imposed in Buganda

¹ G. Walsh and H. R. Montgomery, *op. cit.*, p. 37.

² *Laus*, vol. iii, p. 478.

³ See Chap. XII, p. 762.

by the Kabaka before the British occupation, and was confirmed in Article 14 of the Agreement of 1900; it is now regulated in Buganda by the *Luwalo* law of 1930; it has been extended to the rest of Uganda by the Native Authority Ordinance. The obligation can be commuted for a cash payment which varies from 4s. to 10s. Outside Buganda, persons approved by the native authority or the District Commissioner, according to the district, may be allowed to commute at half the standard rate. The proceeds of the commutation of *luwalo* are paid to the native administrations; about one-third of the adult males avail themselves of commutation in Buganda, and large numbers in the other provinces. Persons who, having opted to commute, fail to meet their liabilities by the due date, may be required to pay a fine of 10s. and to work for a period up to two months, failure to work being punishable with imprisonment; neglect or refusal to discharge the penalty within two months of due date is punishable by a fine of 20s., and the defaulter remains liable to work for two months. Exemption may be granted by proclamation, and this has been given collectively to certain classes of persons.¹ The native administrations of Bunyoro and Toro have imposed a shilling education rate.²

(1) *Nigeria*

The problems of direct taxation have played a more important part in the general policy of Nigeria than in that of any other administration; but in a great part of the territory the tax itself is a comparatively late development. As will subsequently be seen, there has always been opposition to direct taxation in the coastal areas of West Africa, and in the colony of Lagos the British government for many years contented itself with indirect taxation; when in 1895 it proposed to levy a house and land tax, the scheme met with such opposition that it was abandoned. It is noteworthy that there was even more pronounced agitation in 1915 against the imposition of a water rate to finance the city water-supply, and it was only enforced after considerable difficulty. In the western districts of the Southern Provinces the larger states were before the War controlled on a treaty basis; the administration

¹ *Luwalo Law, 1930: Laws, cap. 60, sect. vii.*

² See Chap. XVIII, p. 1240.

did not impose the direct tax on them, except in Benin, which was brought under direct administration as the result of the rising in 1897. In the eastern provinces no tax of any kind was imposed. It was not, indeed, until the system of native administration, introduced into the Northern Provinces, was extended to the south after the amalgamation of Northern and Southern Nigeria in 1914¹ that a regular system of taxation was contemplated, and the purpose of the tax was found mainly in the need for providing incomes for native rulers and funds for native administrations.²

As has been shown elsewhere,³ Lord Lugard had found in the northern emirates a strong political organization, in which the 'tribute-tax' followed the lines common in Moslem systems of rule. He regarded direct taxation as an integral feature of the system of native administration which he introduced; the revenue secured from it was to be shared with the native authorities, 'not as a dole from Government, which would destroy their self-respect, but as their proper dues from their own people in return for their work as Rulers or Judges'. The share allotted to these authorities was to replace their former tributes and also to compensate them for the economic loss involved in the abolition of the legal status of slavery; its corollary was the suppression of other forms of exaction. It was characteristic of the system that in the Northern Provinces the tax was at first collected in the name of the emir and not of the British government; it was equally a characteristic of the system that the native authorities were allowed to retain for their own purposes, or subsequently for the native treasuries, an exceptionally large proportion of the proceeds of taxation.

The first measure introduced in order to give effect to this system was the Northern Nigeria Land Revenue Ordinance of 1904, which simply directed chiefs to pay one quarter of their revenue to government; a Proclamation of 1906 provided for the regularization of the system of taxation by authorizing Residents to assess the tax and to appoint village and district heads responsible for its collection. The earlier multiplicity of dues was consolidated into two taxes, a general tax representing the variety of levies made on settled agriculturists and traders, and a cattle

¹ See Chap. IX, p. 420.

² F. D. Lugard, *Political Memoranda*, 1918, p. 167.

³ See Chap. IX, p. 417.

tax or *jangali* imposed on nomad pastoralists. The system of a flat-rate tax was rejected as suited only to communities at a low economic level where incomes are identical for the majority of the members. The tax actually imposed is described in the Native Revenue Ordinance of 1917¹ as a property or income tax; in Lord Lugard's *Memoranda* it is described as a tax 'on the income and profits of each individual', and 'profits' is defined as 'the gross income derived or derivable, regardless of the appropriation of the whole or any part of it to the use of the owner'; in the case of agriculture it means 'the yield of the land if cultivated to a normal standard'.² The ordinance does not provide for commutation by labour or service.

The imposition of a tax on income had some precedent in the system of the emirates, which had accustomed the people to pay, however roughly, in proportion to taxable capacity. The principle followed in assessing the tax from 1906 onwards was that known as the 'lump-sum assessment', which has in practice taken various forms. In its most complete form the system involves the preparation by the District Officer of an assessment report for each group of villages. The average annual cultivation of the area concerned is estimated, and a cash value assigned to it; the amount taxable is a proportion (usually 5 per cent.) of the gross value thus ascertained. An estimate is also made of other earnings, such as those from livestock, trade, and industries; it is typical that even the assumed income of the drummer, the beggar, or the seller of magic charms enters into this calculation; the amount taxable is taken as a percentage (between 2½ and 10 per cent.) of the total estimated earnings. The sum of the amounts taxable under these two heads represents the 'lump assessment' of the unit, subject to deductions which may be made in view of the condition of the units in question; it is left to the village head and his counsellors to divide the tax among different hamlets; it is again distributed over the family heads, who then make a final division over the members of the family, on their own computation of the income of each individual. The safeguard for the fairness of the final distribution lies in the public character of

¹ *Laws of Nigeria*, revised edition, cap. 74, pp. 807-12.

² F. D. Lugard, *op. cit.*, pp. 165-212.

the procedure, and in the provision of a power of appeal, which seems to be fully exercised, to the District Officer. In some of the emirates the procedure has taken a somewhat different form. In Kano the Survey Department has mapped the lands in a number of the native 'districts' in the neighbourhood of the capital, and the assessment in these areas has largely the character of a land tax, though economic earnings are also taken into consideration. In Bornu the assessment has been left largely in the hands of the native authority, which has issued individual tax-papers showing the amount assessed on each person. Elsewhere, a simple process has been followed involving merely a rough calculation of a suitable average tax per head, with an addition for the richer part of the community; in the pagan areas, a flat rate, which is in effect a poll tax, has been adopted as the only possible expedient; it is assessed separately in small units, and is varied to meet local circumstances.

In the northern emirates the system of assessment results in practice in a wide range of payment by individuals; in Bornu, for instance, the actual amount payable may vary from 1s. to 20s.; the incidence per adult male varies from 1s. 6d. to 11s. 4d.; an average over seven districts is 6s. 9d. The flat rate in pagan areas varies from 6s. to 9s., and is estimated to represent about six weeks' work for an unskilled and a fortnight to three weeks for a semi-skilled labourer. The *jangali* tax is assessed and collected when the cattle owners return with their herds to the districts in which they are deemed to be resident; the rate of the tax is now 1s. or 1s. 6d. per head, and its assessment is necessarily left to the local native authorities. Where the system of lump-sum assessment is in force there is considerable variety of practice followed in its revision. In the more advanced native administrations there is an annual revision of the tax by the native authorities, subject to a periodical inspection by an administrative officer; elsewhere village heads are responsible for such rough-and-ready modifications as may obviously be necessary, a full reassessment being made only where an administrative officer is available for the purpose. Save in the pagan areas, the collection of the tax is everywhere in the hands of the native authorities, the village heads issuing individual receipts and bringing the tax to the native 'district heads', who in turn pay it in at

the capital; the function of the administrative officer is that merely of general inspection, or the hearing of complaints. In the pagan areas he takes a more direct part in supervising the collection of the flat rate.

When direct taxation was introduced in the states of the western provinces of Southern Nigeria, after the amalgamation of 1914, the assessment of the 'income and profits tax' differed in detail from the system of lump-sum assessment adopted in the northern emirates. Thus in Oyo the tax is in theory assessed at $2\frac{1}{2}$ per cent. on the gross income of the farmer, but in view of the general equality of such incomes it actually takes the form of a flat-rate tax of 6s. a head; native traders are, however, taxed at 5 per cent. of their estimated income. In Ibadan the flat rate works out at 8s. per head; but extra charges at a fixed rate are made on owners of cocoa trees and of produce scales, or on persons in receipt of house rentals.¹ There is a similar system in Abeokuta. Under this system the calculation of the number of taxpayers is more important as a basis of revenue than as a means of bringing home individual obligations; it is made in some cases by family or village heads, in others by native authority assessment clerks.

In the large towns of these states the assessment is made by wards, the head of the ward having the same duties as the village head, usually with the advice of a committee representative of various elements in the population. The rate levied in practice in the towns is usually a fixed one for each trade or profession; in Benin, for example, letter-writers pay 20s., shoemakers 6s., and so on; there is also a rent of 5s. on strangers and a 10s. farming rent. For incomes above the average, graduated assessments are made; in Benin, for instance, incomes between £50 and £100 pay 10s., incomes between £100 and £200 pay £1, and so on progressively.

Taken as a whole the system in the south-west allows to some extent of the apportionment of tax in accordance with means, but this is mainly in respect of the charges which fall outside the general flat rate imposed on the ordinary cultivator. The incidence of the tax is 4s. in Benin, but in Abaja it is only 2s. 8d. The collection of the tax rests with the native authorities; the actual collection

¹ M. Perham, *op. cit.*, p. 182.

is made by compound heads, who on making payment to the chief receive a receipt for the whole sum, and a separate numbered ticket for each taxpayer on the list. The supervision of the District Officer is directed mainly to seeing that the total assessed amount is paid in. The system appears to work smoothly; the substantial proportion of the tax-revenue which is allocated to the native authorities serves to maintain their interest in the completeness of the assessment and the collection of the tax; it has been estimated, for instance, that in Benin only some 3 to 5 per cent. of persons liable manage to escape taxation. On the other hand, the right of appeal to officers of the administration affords a safeguard to the individual assessee.

In the south-eastern provinces the direct tax was not introduced until 1928; the only obligations imposed on the native population up to that date took the form of providing labour for public works on the orders of the native authorities. Lord Lugard considered the imposition of a tax in 1914, but abandoned the proposal.¹ The question of reforming the system of native administration came under discussion in 1924 and 1925, and it was decided to impose direct taxation as indispensable for the creation of native treasuries. The original proposal was for a poll tax; this was rejected in favour of the extension of the Native Revenue Ordinance then in force in Northern Nigeria and the south-western provinces; it was proposed to take $2\frac{1}{2}$ per cent. of the average income of the peasant farmer as the rate of tax. Assessment began in 1927, and was followed by disturbances, which were repeated on a larger scale during the attempts made to collect the tax in 1929. As has been shown elsewhere,² the inquiry made into the causes of these disturbances, generally known as the 'Aba riots', pointed not merely to dissatisfaction with the tax, but to discontent with the existing system of native administration. The steps subsequently taken to reorganize that system, and the working of the native treasuries since instituted, appear to have been successful in removing the causes of discontent, and the tax is readily collected by the native authorities now recognized. The assessment has in practice taken the form of a flat rate, varying in different localities; its general incidence, according to one

¹ M. Perham, *op. cit.*, p. 203.

² See Chap. IX, p. 424.

estimate, averages about 4s.¹ per adult male, though in one area the figure is as low as 1s. 6d. per adult male.

The study of the development of direct taxation in Nigeria is of especial interest, partly owing to the intimate relation of the tax to the local system of native administration, and also because it represents an effort, on a larger scale than in any other African territory, to adjust native taxation to the capacity of the individual taxpayer. The lump-sum assessment, which permits of the most effective range of graduation, is of course applied in its complete form only in certain areas of Northern Nigeria; elsewhere the tax tends to take the form of a flat rate. Though the flat-rate tax is also described as an income and profits tax, and is theoretically based on an assumed percentage of gross income, it is clearly not based on any actual calculation of individual income, nor does it vary with it. It has, however, the advantage, as compared with a general poll tax, that the rate can be, and in many cases is in practice varied between comparatively small units, in reference to their local conditions. Again, the system followed in taxing urban natives, though it is not a true tax on income, nevertheless allows of a substantial degree of variation between persons practising different crafts and trades. The procedure in lump-sum assessment bears some resemblance to the method followed for calculating the land revenue in India, though in the absence of a land survey, or the registration of holdings or any record of crop statistics, it necessarily partakes more of the nature of the early 'summary settlements' in India than of the later land revenue settlements, which are based on a wide range of recorded data. It is actually designed rather to differentiate between the general taxable capacity of the various units under assessment than to give an accurate calculation of their income. On the other hand, it shares with the Indian system the advantage that it involves close contact between the assessment officer and the people, and compels him to make a detailed study of their material and social conditions. It has the further advantage that the system of distribution over family groups and individuals gives the people themselves some share in the assessment, and, as has been observed, acts to this extent 'as a binding rather than a dissolving force upon the com-

¹ M. Perham, *op. cit.*, p. 248.

munity and its constituent families'.¹ It has therefore definite benefits, apart from the flexibility in the incidence of the tax. The extent to which it can be regarded as suitable for adoption elsewhere in Africa will be considered later.

(m) *British Cameroons*

In the British Cameroons the system of taxation follows generally that of Nigeria, the provisions of the Nigerian Native Revenue Ordinance having been extended to the mandated territory. In the northern areas the procedure of lump-sum assessment is followed, though in a relatively simple form. In the Moslem areas the village or hamlet is the unit; in pagan areas each tribal area is subdivided into units in accordance with the indigenous social organization. The lump-sum assessment is in theory a proportion of the gross income of the ordinary farmer, though, as has been remarked in dealing with Nigeria, a calculation of this nature can be only a rough approximation; it is, however, varied year by year as the result of a census of population and livestock carried out under the supervision of the administrative officer, the detailed record being prepared by a census scribe. Before the lump sum is fixed the administrative officer takes into account factors such as the character of the harvest or state of prices; when it is announced it is distributed over the individual taxpayers by the village head and his elders, or by the village council, as the case may be. There seem to be few disputes as to the fairness of the distribution. In the more advanced areas there is a substantial measure of differentiation in the tax as distributed; in the more primitive areas it approximates to a poll tax, though even here a difference is sometimes made between persons of varying taxable status. In Dikwa and Adamawa about one-third of the total tax is derived from the *jangali* or cattle tax, which is paid at the standard rate of 1s. 6d. per head of cattle. In 1936 the incidence of the general tax in the three districts of the northern areas amounted to 3s. 3d., 3s. 4d., and 4s. 6d. per adult male; this does not include the cattle tax, which for the most part is paid by those who do not pay the general tax. Collections of the tax are made by village

heads or representatives of local councils; individual receipts are not given unless requested for a particular purpose. There seems little difficulty in realizing collections.

In the Cameroons Province the system of lump-sum assessment has now gradually given way to that of a flat rate, which appears to be considered preferable by the people themselves. The rate is assessed annually for each group of villages; in some districts the method of assessment is explained to be a study of the wealth of the people, as shown by estimates of production and expenditure, as a result of which the 'wealth of the average adult male' is computed.¹ Elsewhere, what is described as a more advanced system is adopted, namely, the careful assessment of a typical individual, on which the assessment of other similar individuals is based. In view of the strength of the administrative staff and of statistical material available, it is clear that such computations cannot pretend to any accuracy; the merit of the system lies in the fact that assessments are made as the result of an annual inspection of each unit, and admit of a substantial measure of variation in the light of local conditions. In the four divisions of the Cameroons Province the incidence per adult male in 1935-6 was 6s. 1d., 7s. 9d., 4s. 11d., and 3s. 3d., the tax in some units of the Bamenda Division being as low as 1s. and rising as high as 8s. in some units of the Victoria Division. The nominal roll of taxpayers is compiled by the village heads under the supervision of the native chiefs or councils, but is checked by the District Officer in the presence of the village elders.² Collections are made by the native authorities, and in the Cameroons Province individual receipts are given; this seems, indeed, to be one of the reasons for the local preference for a flat-rate tax. All the evidence goes to show that collections are in normal years made without difficulty. The allocation of the tax to native treasuries is in the proportion of 50 per cent.

As in the colony of Nigeria,³ a sliding scale of income tax at similar rates is here also imposed on natives with 'ascertainable incomes'; it is practically confined to the Victoria Division, where advisory income-tax assessment committees were instituted in 1935;

¹ *Report to the League of Nations on the Administration of the Cameroons under British Mandate*, 1935, p. 22.

² *Report to the League of Nations, &c.*, 1936, p. 32.

³ See above, p. 578.

apart from the salaried employees of government or commercial firms, only fifty-five Africans in that division are assessed to pay more than the flat rate.

(n) *Gold Coast*

The account given elsewhere of the policy adopted in the Gold Coast in regard to native administration¹ shows that there has been a very slow development of the institutions which normally accompany the extension of administrative rule. That is true not merely of the application of a judicial system, or of regulation of land transactions, but also of the imposition of direct taxation. Hitherto, the Gold Coast has imposed no direct tax in its southern territories; a considerable part of its resources is contributed by the export duty on cocoa, the greater proportion of which must fall on the native producer, but it has also a large income from customs on imports. At an early stage of its history, before the development of the cocoa industry, it sought to raise revenue for the extension of education, medical aid, and communications by means of a poll tax of 1s. on each man, woman, or child resident in districts under British protection; for this purpose an agreement, called the Poll-Tax Ordinance, was concluded in 1852 with the chiefs concerned. Great difficulties, however, were encountered in its collection; the ordinance was for some years in abeyance, and was repealed in 1866. As has been explained in the chapter already quoted, the question of the imposition of a direct tax has more than once been considered, as a means of introducing a system of native treasuries, and of replacing the levies and other irregular methods by which native authorities now finance themselves; so far, however, no final decision has been taken on the question.

In the Northern Territories of the Gold Coast the policy in regard to native administration has followed different lines, and a system designed to assign to native authorities a position similar to that in areas under indirect rule was introduced in 1932.² There had, up to this date, been an obligation to provide unpaid labour on road³ works, and it had been customary for most of the chiefs to collect tribute; some imposed levies for various public purposes,

¹ Chap. IX, pp. 465-77.

² *Ibid.*, p. 477.

³ See Chap. XI, p. 620.

such as education or the maintenance of native authority police. Ordinance 10 of 1932 provided for the levy of a tax, here named a tribute tax, since it replaced the traditional tribute in kind, and this was first collected in 1936. The principles indicated for the first assessment were similar to those adopted in Northern Nigeria, and the result gave a rate of 2s. to 7s. per adult male; but as it would not have been possible to collect tax at this rate unless a high proportion was accepted in kind, the rates were scaled down to the amount which could be paid in cash. This process gave a rate which varies from 1s. to 5s. The tax in practice assumed the form of a capitation tax, though varied in its incidence between different units. The nominal rolls of taxpayers were prepared by District Commissioners, on the introduction of the tax, on the basis of the 1931 census returns; the Native Treasuries Regulations make the native authorities responsible for collection, and they appear to have already shown considerable efficiency in this respect, though there are still cases in which the District Commissioners have to collect the tax, in company with the representatives of the chiefs concerned. The proceeds of this taxation are paid wholly and directly into the native treasuries.

(o) *British Togoland*

In the area which is now British Togoland the Germans had imposed a direct tax, but, on accepting the mandate, the British administration followed the system adopted in the Gold Coast, under which the state confined itself to indirect taxation. In the southern section of the mandated territory there is still no direct tax; the subject of taxation by native authorities, with the view of instituting native treasuries, has been frequently discussed, but so far only the Akpini State Council has introduced an annual levy for this purpose. The levy is small in amount and voluntary, in the sense that it is not enforceable under regulation.

In the northern section a number of native authorities had before 1934 instituted native treasuries, but, with the exception of Mamprusi, where a tax of 1s. a compound was levied, their resources were small, as they were financed only by court fees, tolls, rents, and the like. It was felt that native administration had reached a stage which justified the imposition of a tax, not

merely in order to provide the treasuries with resources, but in order 'to impress on the individual his liability to contribute to the social services of the community of which he is a member'. Regulations¹ were passed providing for the imposition of a tax, called, for the same reason as in the Gold Coast, a tribute tax, of which the whole profit would accrue to the native treasuries, and the first collections were made in 1936. It is a flat-rate tax, assessed on the estimated average income of the individual farmer, but varied in accordance with the economic condition of different units; the maximum rate levied is 2s. 6d., and the minimum 1s. It is payable only by adult males. In one area, Gonja, the tax takes the form of a lump assessment,² which is apportioned over family groups on the system followed in Nigeria.³ Collections are made by the native authorities, and were in 1936 effected with an ease which seems to show that the people appreciate the value of the tax, as a means of providing the treasuries with funds for expenditure on the improvement of their local conditions. In accordance with the original scheme of 1934 all proceeds of the tax are paid direct to the native treasuries.

(p) *Sierra Leone*

In Sierra Leone there are two different systems of direct taxation. In Freetown and Sherbro District a rate is assessed on the value of house property; in the rest of the colony and in the protectorate there is a direct tax which has a history of some interest. The ordinance which established the protectorate over the hinterland in 1896 required every chief to collect and pay to the government a tax of 10s. a year for each house with four or more rooms and 5s. for each house with three or less rooms. The attempt to collect this tax led in 1898 to violent disturbances, in the course of which a number of Creole traders and some European missionaries were murdered. An inquiry subsequently made by a special commissioner, Sir David Chambers, condemned the tax as obnoxious to the customs and feelings of the people,⁴ and Mary Kingsley, who had consistently supported the policy of indirect as against

¹ Regulations, no. 5 of 1934, under Native Treasuries Ordinance, 1932.

² Order 1 of 1937.

³ See above, pp. 578-9.

⁴ *Report on the Subject of the Insurrection in the Sierra Leone Protectorate, 1898*, Cmd. 9388, 1899, p. 73.

direct taxation, assisted the movement initiated in England for the abolition of the tax. The British Government, however, decided to maintain it, though at a reduced rate of 5s., and it is still levied, under the name of house tax, at this rate. It is collected by the chiefs, who are also responsible, under the supervision of the District Commissioners, for the preparation of the tax lists; the chiefs receive a rebate of 5 per cent. of the collections. It is noteworthy that both Sir David Chambers and Miss Kingsley had emphasized that the levy of taxation implied in native eyes an assertion by government of proprietorship over the object taxed. The argument has been used elsewhere, in particular in West Africa, as an objection both to a hut tax or a tax based on land. Whatever strength this sentiment may have ever possessed, it may be doubted whether it carries the same force at the present time; experience has shown that the incidence of the tax, and the manner of its assessment and collection, are considerations of greater importance in determining the attitude of natives towards it. It should be added that in Sierra Leone the chiefs are entitled to levy tribute on their own account, the rate of which is in some areas fixed by government; the tribute is collected by village headmen, and is usually paid to the chiefs in the presence of the District Officer. The substitution of a system of native treasuries, on the lines adopted in Nigeria, is, however, under consideration.¹

(g) *The Gambia*

In the Gambia the yard tax is in effect a tax imposed on the compound as a unit. The rate is 5s. on a yard containing not more than four huts, with an extra 1s. 6d. for each additional hut. A further 2s. is payable for every person resident in the yard who is not a member of the family; this rate is raised to 8s. if the person is cultivating land. The whole of the tax is paid into general revenue.

(r) *French West Africa*

In the French Colonies direct taxation has two elements, the capitation tax and *prestation*; as will be shown in the chapter dealing with Labour,² *prestation* is capable in many areas of com-

¹ See Chap. IX, p. 482.

² Chap. XI, pp. 624-6.

mutation for cash payment; in such cases it is in effect an addition to the capitation tax. The latter is imposed on all natives who are not *citoyens français*; there are exemptions, however, in favour of natives in military service, students, and aged persons without means. In French West Africa the rate is fixed in each colony by local *arrêté*, and there is a considerable difference between the rates imposed in each district. Originally the incidence was low, with a maximum of 16 francs and a minimum of 1 franc; but it was imposed on all individuals, including women and children above the ages of 8, 10, or 15 years, according to the colony. In Senegal the *Conseil Colonial*¹ protested more than once against these age limits, and in 1921 the minimum age was raised to 10 for that colony; it has since been raised to 14 in all parts of French West Africa except Dahomey, where it is 16. The average rates were raised considerably in the period following the War, but during the governor-generalship of M. Brévié, which coincided with the worst period of the economic depression, they were again reduced, the combined average of capitation and livestock taxation per head falling from 39 fr. 80 in 1930 to 29 fr. 80 in 1933.

The livestock tax or *pacage*, which is of the same nature as the *jangali* of Nigeria, was imposed in Senegal, Mauretania, the Niger, and the Sudan. It affected principally the horses and cattle of the pastoral tribes, and the goats of the more sedentary tribes. It was discontinued, except for nomad tribes, in many areas in 1935, the capitation rate being slightly increased, and in 1936 was abolished in all colonies except the Niger, where it was considerably reduced.² In Mauretania, the French have adopted the Moslem system of a *zakkat* tax, fixed at one-tenth of the value of all animals, and an *achour* (usher) tax, which is a tithe of all cultivated products; the tribal areas in which this system is in force do not pay the capitation tax.

Assessment of all taxes is mainly in the hands of the chiefs, who are responsible for compiling the tax registers, subject to supervision by administrative officers; but the check exercised is, in view of the strength of the staff available, necessarily in-

¹ See Chap. VI, p. 197.

² *Discours prononcé par le Gouverneur Général à l'ouverture de la Session du Conseil du gouvernement*, 1934, p. 28; 1935, pp. 32-3; 1936, p. 30.

sufficient. In 1933 it was decided to appoint a number of special census officers,¹ part of whose duty would be to carry out a more careful assessment, but by 1935 this had been done only on an experimental scale in Guinea. Assessments for the livestock tax are based on declarations made to chiefs, though indirect sources of information are utilized, such as records of division of herds on the death of the owner, or complaints of defective registration by potential heirs. Each man is responsible for the stock in his charge, whether or not he is the owner, a measure which prevents evasion, but has the effect that the incidence of the tax is not necessarily proportionate to individual wealth. There would seem to be a lower proportion of efficiency in the assessment of this tax than in that of the capitation tax.

Collection of both forms of tax is made by the chiefs, who on making payment are given the appropriate number of receipts for distribution, in some areas in the form of disks (*jetons*), but the administration does not itself keep a record of individual taxpayers, a fact which inevitably places very considerable powers in the hands of the chiefs. The chiefs receive a rebate on collection which varies from 3½ per cent. in Dahomey to 10 per cent. in parts of Mauretania; in the Sudan they receive 2 per cent. of the capitation tax and 10 per cent. of the livestock tax. A system of payment by instalments is in force in Dahomey. Here the head of each family is responsible for the contributions of its members, and on presentation of any sum at the administrative headquarters can obtain stamps representing the amount paid. A record of the amount is kept at head-quarters by means of counter-foils, so that the progress of collection can be estimated at any moment.

(s) *French Equatorial Africa*

In French Equatorial Africa the system is now similar to that of French West Africa. The tax imposed in the earlier days of administration took the form of a delivery of goods in kind, ordinarily rubber, of the value of 3 francs per individual, a regulation made mainly in the interests of the concessionaire companies, whose abuse of the privilege was largely responsible for the move-

¹ See Chap. IV, p. 123.

ment which resulted in the curtailment of the concessionaire system. In 1909 the rubber tax was abolished in favour of a capitation tax, to be paid in cash; payments in produce were to be made only in exceptional circumstances. The tax is varied by districts; the minimum in 1935 was 15 francs and the average perhaps 30 francs; but the lack of transport or opportunities for wage-earning gives to the tax a higher real incidence than in French West Africa; its real incidence is further enhanced by the fact that it is payable by both sexes. It has been mentioned¹ that there has been difficulty in maintaining the administrative staff at the necessary strength, and the cadre has more than once been quite inadequate to conduct the necessary supervision over the assessment of the tax and its collection by chiefs; even in normal times this seems to be noticeably less than in French West Africa; save in the towns, where a nominal roll is kept, no tax receipts are issued. The chiefs are authorized to retain 5 per cent., reduced in proportion to delay in collection. It has been admitted on good authority that the collection of the tax has in some years involved much pressure and some abuses; it was indeed described as the 'nightmare of every official', and as constituting in some areas a 'real disaster for the natives'.²

(t) *French Cameroons*

In what is now the French Cameroons mandated territory, German taxation was based on the imposition of a labour tax limited to thirty days, but commutable for cash. The French administration has substituted a *prestation* and also imposed a capitation tax; as in their other African colonies, the rate is varied by districts. Natives are divided for the purpose of assessment into classes according to the nature of their employment and status; the minimum payable is 37 francs and the maximum 70 francs, including a medical tax of 10 francs, which has since 1934 been combined with the capitation. The tax is payable by both sexes over 14 years and under 60; school pupils, soldiers, and women having more than five children living are exempt. Assessments are made after

¹ See Chap. VI, p. 241.

² M. Archimbaud, *Rapport du Budget Général, Ministère des Colonies, 1925, Chambre des Députés*, no. 518, p. 356.

consultation with chiefs of districts and a council of notables; the collection is made by chiefs. There is a closer supervision exercised over tax procedure than in Equatorial Africa.¹ The floating population, including foreign natives, pay the tax at rates of 40 francs for men and 30 for women.² Natives in towns are also subject to a tax on house property and rent on the same basis as Europeans, and a cattle tax of 3 francs per head is payable in the cattle-owning areas in the north of the territory.

(u) *French Togoland*

In the French mandated territory of Togoland all natives of both sexes have to pay tax, except married women, infirm persons, scholars, and soldiers. The amounts due are graded by income, which is assessed after consultation with a council of notables. Natives whose income is less than 4,000 francs pay from 7 to 20 francs, according to the district. Incomes from 4,000 to 7,000 francs pay 70 francs and incomes exceeding 7,000 francs pay 110 francs. In addition, there is a percentage tax on the higher incomes, ranging from 1 per cent. on incomes in excess of 10,000 francs to 3 per cent. on incomes exceeding 100,000 francs. Until 1937 there was also a medical tax; for incomes over 10,000 it was 70 francs, and it was between 5 and 12 francs in the lowest category, according to district. In the lowest category the payer receives a metal token as a receipt for payment; the superior categories have their payments entered on a nominal roll and receive receipts. Chiefs collecting the tax receive a payment up to 10 per cent.; the government holds the chiefs responsible for a lump-sum payment. A system of *prestation* is in force for labour on works of public utility; payment for commutation varies from 1 to 10 francs, according to districts; the number of days of labour is fixed from time to time and has varied from 4 to 6. Chiefs also receive 10 per cent. of their collections of the exemption payments. A tax on urban house property from 4 to 2 per cent. is assessed by a committee on which native notables are represented. In a reply to the Mandates Commission the average native taxation in 1935 was given as 9 fr.10 per head, European as 251 francs.

¹ See Chap. IX, p. 490.

² *Arrêt* of Sept. 14, 1933.

(v) *The Belgian Congo*

The early history of taxation in the Belgian Congo presents some points of resemblance to that of French Equatorial Africa; the labour tax imposed by the Congo Free State, though limited in theory to forty hours a month, was in practice unlimited in duration; it took the form of a forced collection of rubber for the benefit of concessionaire companies, or the state. One of the first efforts of the Belgian government after its assumption of control was to remedy the abuses of the labour tax system; it passed in 1910 a decree¹ providing that taxes should be paid only in cash, and a capitation tax was imposed on adult males with a supplementary tax for each additional wife. The rates of this tax are fixed locally and may be reduced or increased from time to time or suspended altogether even during the period of collection; exemptions and rebates are given to encourage large families.² Defaulters are employed on public works for two months; only persistent defaulters are imprisoned. In 1933 defaulters numbered 40,000. The rates vary from district to district; in the Katanga area, from the equivalent of 1s. 6d. to 8s., the average being 2s. 6d., with 1s. 3d. for additional wives; in the Congo-Kasai from about 6s. to 7s. 6d. and 3s. for additional wives. The entire proceeds of the tax are paid into general revenue. Native local treasuries are financed by a further contribution calculated as a proportion, usually 10 per cent., of the capitation tax. The fact that the administration has at its disposal a large cadre of *agents territoriaux* enables tax procedure to be carefully regulated. Assessment of tax is based on a census; each taxpayer holds a *carnet d'identité* on which entries of payments are made, and a metal token is also issued to him. Native collectors tour the villages, but their duties are confined to book-keeping and calling payers to certain points, where payment is made directly to the administrative officer; the assistance of the native authorities is also utilized for the same purpose, but the chief takes a less important part in assessment and collection than in the French or in some of the British territories.

¹ Decree of May 2, 1910.

² *Codes et lois du Congo belge*, 1934, p. 1370.

IV. CONCLUSIONS

There is a striking difference in the manner in which direct taxation affects Europeans and Africans. The amount due from the European is usually related to his financial capacity, and where this is not so the flat rate does not impose a heavy burden, save on a very few of the poorest; it must seldom be the case that a European has to work merely to earn his tax. In the case of the native, taxation introduced a money economy into his life which had no relation to his traditional ideas of wealth, and, where the incidence of taxation is based on his capacity for earning the money rather than actual wealth or income, it causes a dislocation in his life, and forces him into an activity in which he would not otherwise engage. While it would not be correct to say that taxation is to-day the main reason which induces the native to seek work,¹ the persistent and recurrent demand by the authorities for money for taxation necessitates a continual individual effort which has little counterpart with Europeans.² The problem of native taxation is, therefore, not merely one of securing that the incidence of taxation should be related to the financial capacity of the individual; it is no less important that an administration should study the social consequences of the burden which it is imposing. The effect of tax systems on the native population, such as the dislocation of native society owing to the migration of adult males, amounting in some areas to 50 per cent.;³ the drift of the population to urban areas; the consequences of the prosecutions for tax default; and the difficulties of collection, involving the administrative officer in activities which cannot but prejudice his relations with the native population, provide sufficient arguments for the need for the most careful consideration of the form which native taxation should take.

It will have been seen that, of the areas dealt with in this Survey, only one, the southern territory of the Gold Coast, has been able to dispense with a direct tax; apart from the exigencies of general revenues, the growing needs of the native treasuries effectively

¹ See Chap. XI, p. 648.

² *Report on the Financial and Economic Position of the Bechuanaland Protectorate*, Cmd. 4368, 1933, p. 23.

³ *Report of Committee appointed to Inquire into Emigrant Labour*, 1935, p. 36.

commit other governments to the retention of some form of direct taxation. It will be recognized, moreover, that in some areas, such as Nigeria and the northern parts of the Gold Coast and British Togoland, as also parts of Tanganyika, it has been possible to justify taxation as relieving the peasantry from exactions by the chiefs. It has been deemed advisable to give in the course of the present chapter some details of the rates imposed in each area, but comparison even of the cash incidence presents considerable difficulty. Thus the average rate of the direct tax imposed by the French administrations appears moderate in relation to that in force in many of the British colonies, but in view of the fact that the tax applies to most women, and to large numbers of children, it is necessary to refer to the incidence per head of the population as a basis of comparison. The figures are given on page 547, but they, of course, afford material only for comparing the cash incidence; an elaborate study of wages and prices would be necessary to establish the relative real incidence.

It is correct to say that of recent years administrations have shown themselves impressed by the need for moderation in native taxation; there has been no general tendency to increase the prevailing rates, and, partly as a result of the experience gained during the period of depression which began in 1929, there has in most areas been a movement towards a greater discrimination in assessment. It is perhaps true to say that at the moment the procedure followed in taxation demands more attention than the pitch of the rates imposed. This fact lends special interest to the differences which the previous study has revealed between the methods pursued in Nigeria and those in other parts of Africa. In Nigeria among a comparatively stabilized population, most of whom have a ready market for their produce, it has been possible to introduce systems of taxation, varied from district to district, which do not unduly disturb the social and economic life of the people, and as the incidence of taxation is based on lump-sum assessments distributed by native authorities over individual taxpayers, or, in less advanced districts, over villages or groups of villages, there is considerable fluidity and scope for variation according to individual or collective wealth.¹ In Central, East, and South Africa, on the

¹ See above, pp. 578 ff.

other hand, there were, when taxation was first imposed, large areas in which the population was not stabilized in the same sense as in British West Africa, nor was the general economy directed in the same degree to the growing of saleable crops. Uganda may be said to form in some sense an exception to these general conditions, and, as has been seen, its system of taxation actually shows a certain degree of differentiation. But elsewhere taxation has taken the form of hut or poll taxes, imposing a rigid flat rate over whole countries, as in the Union of South Africa, or over districts, as in the East African territories; further, assessment is based on a general estimate of the African's capacity to pay and of the sum required to be raised, rather than on any estimate formed of the wealth of the community; nor is any attempt made to vary the incidence of the tax according to the financial capacity of individuals or small groups, except in the case of a few large incomes. As the history of labour policy given in Chapter XI shows, the flat-rate tax was at one time deliberately used in order to produce a supply of labour for the mining and farming industries; and though other inducements have now in great part taken the place of the tax as an incentive to wage-earning, it still remains the fact that, where African taxpayers are unable to grow saleable crops, the effect of a rigid flat rate is to drive the tax-paying male population to industrial and urban centres, and consequently to disorganize native society to such an extent that, on several occasions, governments have felt obliged to reduce the amount to be paid by men who are without resources other than their labour.

The advantages of a flat-rate tax lie in its relative ease of assessment; the operation should involve little more effort than the preparation of an accurate population record. It is contended again, with some justice, that, as the administration of Northern Nigeria felt when preparing to tax its pagan areas, the flat rate is the only type of tax possible in very backward conditions. There is, finally, some ground for the contention that, even in more advanced areas, the equalitarian sentiment of African society supports a uniform tax. But, as a matter of practical administration, the success of this type of tax may be said to be in inverse proportion to its incidence; its difficulties increase with every step it takes above a figure so low that it has little fiscal value; and, as the

period of depression has proved, it is singularly ill-adapted to meet changes of conditions due to climatic or other vicissitudes. Not the least of its difficulties is the effect which, especially at such periods, its collection inevitably produces on the relations between the people and the administration.

Apart from these difficulties of an administrative nature, it is clear that if a tax is so pitched that it is capable of being paid by the poor, it must be unduly favourable to those who are better off; and in many areas African social economy already shows signs of a growing measure of differentiation. It is probable that if any radical change of system were feasible more than one administration would be glad to adopt it. It may be possible that there are some areas where society is sufficiently stabilized, and the growth of saleable crops sufficiently advanced, to justify the adoption of the principles of taxation followed in Nigeria; Uganda and some other areas round Lake Victoria suggest themselves as possibilities. But there are clearly many areas where this is impossible, and in particular those devoted to cattle-breeding. As has been seen, the case of the pastoral nomads has been met by the *jangali* or an equivalent tax in British and French West Africa; the feasibility of imposing a cattle tax in the more settled conditions of East Africa has been more than once investigated, but the difficulty has been considered insuperable, owing to the complications arising from African customs regarding the ownership and use of beasts, and because such an innovation might offend the sentiments of natives.¹ The need for closer study of native conditions and resources before any direct taxation either of cattle or of property could justly be applied is evident.²

In the absence of means for approximating taxation to individual incomes, a number of governments have now for some years sought to adjust the incidence of the tax by graduation between districts, or even smaller territorial units. Though this has not been attempted in South Africa, it is, as will have been seen, now usual in East Africa, and in the French and Belgian colonies; the latter, indeed, would appear to have carried differentiation down to smaller units than those commonly adopted in the British prac-

¹ *Report*, op. cit., Colonial 116, 1936, pp. 39-42.

² *Report of Native Economic Commission*, 1930-2, U.G. 22, 1932, pp. 97 ff., 224 ff.

tice. The system has very obvious advantages, though at the same time it involves some anomalies; the residents of a 'poor' district, to which industrial wage-earning is easily accessible, may actually be better off than those of an area with better agricultural conditions. Moreover, the investigation made into the possibilities of further graduation of taxation in Tanganyika¹ has shown that even in a country with a relatively simple economic organization the problems presented are numerous and complex. Tax laws provide for exemptions on a variety of grounds, economic and personal, but they cannot, under the present system, take into account the diversity of economic activities and degrees of earning capacity which differ from group to group, nor the varying capacity to pay determined from time to time by fluctuating export prices and wage levels.

Apart from questions connected with the system of territorial graduation, attention has also been directed to a number of minor schemes for securing a better adjustment of the tax. Some of the African governments, however, seem to hesitate to run the risk of the loss of revenue which might result from experiments to remove inequalities in taxation. Thus taxation on additional huts for women is retained, although it is becoming increasingly open to doubt if the assumption that plural wives indicate wealth, and additional capacity to pay is actually a satisfactory basis of taxation. In some territories, again, the age at which youths become liable to taxation is not raised, for fear of loss of essential revenue;² circumstances can hardly justify the diversity of practice observed in deciding when African youth is capable of doing a man's work. There seems also some reluctance to experiment in the methods for paying tax by instalment, which was at one time recommended for adoption by the conference of East African Governors.

A further factor of importance in the operation of the tax is the method adopted for assessment and collection, particularly in regard to the association of native authorities in these processes. The previous pages show that a great variety of practice prevails. Many administrations would no doubt desire that as large a part as possible of this type of work should devolve on native authorities; but there is, in the first place, an essential difference between the

¹ See above, p. 570.

² *Report*, op. cit., Colonial 116, 1936, pp. 37-8.

areas with a fully stabilized and self-supporting population, and those in which for economic or other causes large numbers of persons have to migrate in search of wages. The issue is also affected by the extent of the association established between the tax and the revenues of the native administration treasuries. In Nigeria, the northern parts of the Gold Coast, Uganda, and parts of Tanganyika, where the people raise their tax-money by selling their crops, and rarely leave home to work for wages, the collection of the entire native tax by the native authority is possible, and, as the payment of a percentage of the tax can be made easily and immediately to the native administration, the people can see the direct benefit of taxpaying within their own areas, and the payment of tax-money can be intimately linked to the system of local native government. Elsewhere, however, where large numbers of taxpayers are away from their homes for long periods and pay at their place of work, it is clear that a large part of collection must be effected by government agencies; the alternative which has been mentioned above, of the payment of a basic poll tax and a separate cess, would possibly impose an extra burden on the payer who is able to find his money at home. The position of the native taxpayer has also to be considered; he must naturally desire to be rid of his obligation in the quickest way while work is in hand, and we have seen that governments recognize the importance of collection from migrant labourers by making special arrangements at the place of work.¹

Even in the most favourable circumstances, success in the employment of chiefs or other native authorities in assessing or collecting the tax must depend on the character of the supervision exercised. The experience gained in British areas has shown indeed that even the removal of collection from the native authorities into the hands of agents of the administrative officer does not always protect the payer from oppression, and that where the native authorities can be entrusted with collection it is still necessary for the register on which collection is based to be in the hands of the administrative officers. The most significant feature of the French system is the part taken by the chiefs in assessment and collection. The greater part of their personal emoluments are received from the rebate

¹ See above, p. 562.

on tax collections, a fact which has clearly affected their attitude in voting for increases of taxation in the Senegal *Conseil Colonial*. In the debates of the *Conseil* it has been asserted that they frequently fail, when preparing assessment lists, to take account of deaths and migrations, in order that they may retain the percentage on the total sum due when the village was assessed. It is clear, again, that a system which does not provide for check over the issue of individual receipts is liable to abuse; and there are complaints that in certain French areas chiefs collect tax without issuing receipt tickets. The use of native authorities in the assessment and collection of tax is, of course, common in British territories also; but there is this much difference, that where the system of indirect rule prevails the allocation of a portion of the tax accrues to the benefit of the native treasury and not to the chief personally. A procedure such as that adopted in French areas, if it is not to bear harshly on the individual, needs closer official supervision than is always available in some of the areas concerned. In the Belgian system the chief takes a relatively minor part in the proceedings.

In urban and industrial populations there appear to be two classes of taxable persons. The first might be looked on as a semi-permanent population which has no intention of returning home; the second is composed of migrant labourers who intend to return to native areas as soon as they have earned sufficient money. There are many opportunities for taxing the first class according to financial capacity, but little attempt seems to have been made in the industrial centres of South and East Africa to form registers or make assessments on which the incidence of taxation could be based. The difference in circumstances among the urban populations in the Union must be very considerable; farther north there is a growing settled population in non-native areas, and the imposition of rigid flat rates must produce anomalies which might be corrected if a careful assessment of individual or group capacities were made. The second class is frequently required to pay at the rate applying to the place of work after it has been away from home for a comparatively short period; an investigation into industrial conditions in Uganda¹ led to the conclusion that the home rate

¹ *Report on an Investigation into Industrial Conditions Affecting Unskilled Labour in Uganda, 1937*, para. 107.

should be paid by the migrant unless he becomes a permanent resident; should any extra taxation be imposed on the migrant on account of his wage earnings or of local obligations in the urban area, it might take the form of an immigrant tax or a local cess; where a percentage of tax is paid to the native treasury, this system would allow for more easy distribution than would be the case if the migrant paid the local district rate.

In some of the British areas tax collection has frequently involved administrative officers in tasks as burdensome as they are unwelcome; if there is not the same complaint of the burden of 'tax-hunting' from French territories, it must be remembered that France does not, like Britain, publish reports in which administrative officers are given liberty to express their views. Such activities are undoubtedly prejudicial to an officer's more important functions, and occupy an undue amount of his time. More detailed systems of assessment would occupy his time more profitably and involve less risk of impairing his relations with the people. Nor would revenue necessarily decrease under a more fluid system of assessment, except in cases where the African community has been expected to produce more than can be justly demanded from it. If it be decided in any area to undertake inquiry with a view to improving the system in force, a useful precedent is afforded by the detailed investigations in conjunction with the native authorities which were made in Nigeria preparatory to making the tax assessments, and have been attempted to some extent in Tanganyika. If detailed assessments are attempted in East and South Africa, although individual assessment based on the actual ascertained income of the taxpayer may be impossible at the present stage, it might well be found possible to vary the rate within the district or group, in order to take into account, to a greater degree than has been attempted so far, not only the markets for local crops, the accessibility to labour markets, and the rate of wages earnable, but also the circumstances of certain classes of the community, such as elderly craftsmen and those of poorer physique. These investigations would possibly not only allow a greater degree of fluidity than at present, but also provide studies of native land tenure or conditions of cattle-owning which would in time allow for a further modification of the incidence of

tax, in closer relation to actual financial capacity. They would also allow rigid forms of exemption to give way to partial exemptions based on ascertained incapability, which might help to discourage the migration of persons to urban areas in the hope of obtaining work for which they are obviously not suited.

CHAPTER XI

THE PROBLEMS OF LABOUR

I. INTRODUCTION

(a) *The General Nature of the Problems*

ON a first view, the distinguishing feature of labour problems in Africa is the inadequacy of the supply of labour to the demand. In some areas this was probably due to the drain on the population from the slave trade in all its branches. African slave labour built up the cotton and tobacco industries in the United States and the sugar industry in the West Indies, while the great deficiency of indigenous labour in Africa has been a noticeable factor not only in its economic but in its political history; and few of its territories have escaped incidents arising from the difficulty of obtaining manual labour in modern economic conditions. The importation by the Dutch East India Company of convict and other labour from its Far Eastern settlements gave the Cape its 'coloured' problem, and the use of indentured Indian labour on the sugar plantations of Natal from 1860 onwards added a new complication to the population problems of the Union.¹ The revelation of the shortage of labour available for the internal development of French West Africa had a decisive effect in modifying the views of that section of French public opinion which saw in the African colonies an inexhaustible reservoir of recruits for the French armies, and the use of Chinese labour on the Rand had reactions which reached as far as the field of British party politics. Railway construction in the French Congo, and in early times in the Belgian Congo, presented painful evidence of the abuses which may attend the resort to forced recruitment in order to supply the deficiency of voluntary labour. If some of these incidents are characteristic of an era which is now passing away, the deficiency in the labour supply still gives rise to problems which are of no little importance both to employers and to the administration.

¹ See Chap. VIII, p. 319.

Another class of problem, of a wider character and of greater importance to the African, is being created by the social consequences of the demands which modern capitalist organization is making on a population whose institutions had hitherto been those appropriate to a subsistence economy. Elsewhere the rapid growth of industrial conditions has produced its reactions on the social organization, but the conditions have seldom been such as to demand an adjustment so sudden or so radical. In Europe the Industrial Revolution marked in effect only the substitution of large-scale processes for domestic or small-scale industry. The change in the character of industry brought with it all the difficulties in social adjustment that result from the quick growth of industrial centres and the substitution of urban for rural life, but it did not produce a problem of adjustment in the basic conditions of life so marked as that which followed the introduction of industrial conditions in Africa. Again, in Japan a capacity for rapid readjustment has given the transition to industrial conditions almost the appearance of a natural evolution; while in India the introduction of modern capitalist enterprise caused little social dislocation in a population which was already experienced in small-scale industries, the production of marketable crops, and the employment of wage-earning labour.

The introduction of capitalist undertakings in Africa found a population that had little incentive to improve its subsistence by wage-earning, and since it was inexperienced in the use of money it was slow to react to the stimulus of cash inducements. The entry of the African into the new economic field was therefore difficult and hesitating, all the more because those who controlled that field were Europeans or Asiatics. Native societies had their own systems of economic organization, the obligations of which were well recognized, but the discipline of regular labour in compliance with the orders of those who had no traditional authority was unfamiliar to them. The practice of slavery had also left a legacy which created suspicion against the new relationship of employer and wage-earner. But the difficulties have not been limited to those attending the entry into a new relationship; the extension of employment has created for the native a series of problems which are far-reaching in their effect on his social life. Even when the

new employment does not remove the wage-earner from contact with his own community it gives him a new economic independence; he is no longer dependent for the essentials of life on close co-operation with his kindred; and when it involves long absence, it is liable to be disruptive of those intimate personal bonds which are the ultimate source of moral restraint.

The migration of large numbers of the male population from their homes to distant places of work is one of the characteristic features of the labour question in Africa. Migrations even on a larger scale have accompanied the introduction of modern enterprise elsewhere; for instance, the development of jute and cotton factories in Calcutta and Bombay, of tea in Assam and Ceylon, and of rubber in Malaya; but in Africa the effect has perhaps been more conspicuous owing to the social consequences involved, and the new problems in health which have been created through the native's susceptibility to disease on any change of his environment.¹ The aggregation of industrial populations has created new problems also in administration, for the labourer passes out of the range of his own customary law and the authority of the tribal organization.² While, therefore, the gradual extension of wage-earning following the expansion of new economic conditions may solve some of the problems of employers, and may also make it unnecessary for administrations to maintain some of the special regulations now in force, the growing entry of natives into a wage-earning economy will tend to enlarge the range of the social problems which it has already created.

It will be convenient first to give some view of the range of these problems as indicated by the numbers of natives now employed in different territories as wage-earners. It is proposed next to consider the questions which are connected with the supply of labour for state or public purposes; except, perhaps, in the Union of South Africa, these were the problems which at the outset occupied the chief attention of administrations. In dealing with them it will be necessary to consider the native custom under which those in management of tribal or group affairs could call for

¹ See statements in *Report of the East Africa Commission*, Cmd. 2387, 1925, p. 43; *Journal officiel de la république française*, 24 novembre, 1927, p. 3185; and *Deuxième Congrès Belge, Bruxelles*, 6 et 7 février 1926. *Comptes rendus et Rapports*, pp. 71-2; also Chap. XVII.

² See Chap. IX, pp. 496 ff.

communal labour, for, as will be seen, the existence of this custom has facilitated the exaction by the administrations of labour for public purposes. The use of compulsion for stimulating native production, whether in the form of subsistence or marketable crops, will next be considered; it is in some sense complementary to the use of 'communal' labour. The methods used in securing workers for private purposes fall into a separate category. Their study will involve some mention of the past influence of slavery, and a description of the special regulations which at the present time control recruitment or provide penal sanctions for breach of labour contracts. Passing from the problems connected with the use of labourers for private employment, it will next be necessary to study the legislation regulating the treatment of workers in respect of health, welfare, and the like, and the administrative organizations created to deal with labour questions.

(b) *The Number of Natives Employed as Wage-earners*

No complete statistics are available on this point, and such information as it is possible to give has often only an illustrative value. Professor J. F. W. Grosskopf¹ calculated that in 1933 there were 856,184 male natives occupied within the industrial system proper of the Union, of whom 36,026 were in a higher group, including police, clerks, and shop assistants, and the remainder in various classes of manual labour. In January 1937 the number of non-Europeans employed in the South African mines was 393,213, and the agricultural statistics of 1930 showed 475,909 natives as employed on farms, of whom 114,610 were females. In view of the increase in mine labour since 1931, it is probable that the wage-earners in the Union now amount to about 1,250,000,² though it is not possible to distinguish those who are entirely dependent on wage-earning from those who combine it with cultivation.

The Southern Rhodesia census taken in 1936 gave a total of 254,297 natives in employment, of whom only about 42.5 per cent. were Southern Rhodesian natives. In Northern Rhodesia the number of natives employed in the colony was given in 1936 as 53,462, while the number of Northern Rhodesians employed outside was

¹ *Weltwirtschaftliches Archiv*, no. 38, Oct. 1933.

² See Chap. XX, p. 1362.

put at 51,212,¹ though this is probably an under-statement. The Annual Report for Nyasaland for 1929 indicated that 108,000 natives were in employment: there are no later figures published, but the Committee on Emigrant Labour (1935) put the total number of natives employed out of the territory as about 120,000. In Tanganyika the number employed in 1936 was given as 252,106; in Kenya it was estimated in the same year that 182,858 were in regular employment. Uganda gave in 1936 the number of persons employed as 50,636, but the figure seems to exclude the large numbers who come into temporary employment in the cotton-picking season.

In Nigeria the figures given officially in 1936 were 227,451, and in the British Cameroons 18,120. In the Gold Coast the official study based on the census of 1931 gave the Africans employed in industry as 12,769, and those engaged otherwise than in industry as 121,656, but these include certain classes, such as hawkers and artisans, who are not necessarily wage-earners.² In 1934 the official statistics showed 11,319 in general employment and 23,642 in the mines; in 1936 the average daily mining labour force was 34,774. In Sierra Leone 9,445 natives were in mining employment in 1935. There are no complete figures available for British Togoland or Gambia.

In French West Africa in 1935 the number of wage-earners was 178,908, of whom 23,608 were serving under written contracts. In French Togoland in 1936 wage-earners numbered 1,719. There are no figures for French Equatorial Africa, but the number of labourers in the French Cameroons was given in 1935 as 53,604. The Belgian Congo in 1936 gave a total of 409,274, divided as follows: natives employed at a long distance from home, 127,319; at a short distance, 135,315; and near home, 146,640. In Ruanda-Urundi the figures for 1936 were 11,177 as permanent and 31,681 as non-permanent employees.

The figures which it has been possible to quote, incomplete as they are, have certain other defects. They give for the most part only the numbers in regular employ by companies, individual European or Asiatic employers, or in government undertakings;

¹ *Report on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, para. 93.

² A. W. Cardinall, *The Gold Coast*, 1931, pp. 170 ff.

they must in many cases exclude the numbers of more casual wage-earners and those in the employment of natives, who have in some areas begun to employ labourers for wages, as in Uganda, or for other considerations, as in the Gold Coast, where workers are allowed the usage of land and a share in the profits realized. The chief deficiency of these figures is that they do not, and in the circumstances cannot, provide any basis for calculating the proportion of the population which is dependent on wage-earning. In many types of employment, such as the gold-mines of South Africa, the labourer is not accompanied by his family, which draws its subsistence from its own cultivation. Again, in some cases wage-earning is undertaken only for the sake of meeting the native tax or for personal expenditure, with the result that only a small part of the earnings goes to the support of the family. On the whole, it may be said that the greater part of native Africa is mainly engaged in its own subsistence economy; a further but smaller proportion devotes itself mainly to the production of marketable goods, and only a small proportion is at present dependent solely on wage-earning.

II. COMMUNAL AND COMPULSORY LABOUR

(a) *The Customary Use of Communal Labour*

Native society in Africa appears to have recognized in most areas the custom of supplying labour for common purposes, such as the clearing of paths or bush, or the destruction of mischievous animals. It was also well recognized that the chief or group leader had a claim not only for some form of tribute, but for communal labour for certain purposes connected with his own position. This custom has had two developments, both of which have had their influence on the subsequent history of labour in Africa. The customary use of 'communal' labour for tribal purposes will be seen to have been the basis of the procedure adopted by early administrations in securing labour for a great variety of public uses, and the practice of rendering service to chiefs was subsequently used by the latter to secure resources for personal expenditure on other than communal purposes. It will be simpler to deal first with the latter development, for it is one which has remained

within the field of native custom, and has not had the same influence as the former on the wider field of employment for public purposes or private uses.

The services rendered to a chief, whether in the form of tribute or by way of labour, were not entirely directed to enabling him to maintain his own position; they also served communal purposes in so far as they enabled him to meet his customary responsibility for providing tribal hospitality, for maintaining the destitute, or for laying up a reserve against times of scarcity.¹ When needs were simple this obligation was scarcely felt and readily rendered. But with the growth of a money economy these services acquired a cash value, and the chief, in addition to securing a personal income from tribute in kind, was able to count also on the receipt of what was practically a tax in the form of labour. At the same time his purely personal expenditure increased and absorbed much of what would formerly have been devoted to the discharge of tribal obligations. The process was one for which analogy can be found in the steps by which in Europe the feudal lord, or the owner of a manor, was enabled to realize in the form of rentals what were originally obligations of the nature of personal service.

The extent to which the demand for labour by African chiefs has constituted a real burden has varied widely in proportion to the strength of their political position, and since the discharge of the obligations has rested within the field of native custom, it is not easy to estimate the extent of the labour actually engaged. Some typical cases may, however, be quoted. The reservation to the chiefs in Basutoland of a large area of land, the *Tsimo ea lesa*, cultivated by free labour (*letsema*), was no doubt little felt when the number of chiefs was limited and the chief used the proceeds mainly to discharge his tribal responsibilities, but it became a substantial burden when a large increase in the number of chiefs followed from the adoption of the practice of 'placing' members of the ruling families. The Laws of Lerothodi² empowered the chiefs to summon labour to cultivate their lands, and the increase of the days of *letsema* from four to twelve produced complaints

¹ I. Schapera in *Western Civilization and the Natives of South Africa*, 1934, p. 25.

² See Chap. IX, pp. 396 ff.

with which the government was forced to deal. In Bechuana-land the regimental system is a survival from the days when military service was required by the chief and entry into a regiment followed on the youth's passing through initiation ceremonies and so assuming the responsibilities of manhood. It now survives as a convenient organization for compulsory tribal labour and has been used to call out labour for a variety of tasks, including the building of a mission church, the construction of an aerodrome for government, and even to assist a chief in collecting arrears of hut tax by rounding up the cattle of defaulters. Since 1934 the usage of this compulsory labour is defined by proclamation.¹ Again, in the French Cameroons the large farms which the Germans encouraged the chiefs to maintain, and which still exist, must necessitate the use of a large body of compulsory labour. One of these chiefs maintained at one time a force of police which was in part used to secure this labour. In Sierra Leone the Forced Labour Ordinance of 1932 (section 4) contains detailed provisions relating to personal services for recognized chiefs, and provisions of a general nature are found in the Ashanti Labour Ordinance of 1935, the Gold Coast Northern Territories Labour Ordinance of 1935, and the Nigeria Forced Labour Ordinance of 1933. Personal services are prohibited in the Gambia, Kenya, and Tanganyika.²

As has been shown elsewhere,³ the existence of this practice was one of the factors which weighed with the British administrations in their decision to adopt a system of assigning salaries to chiefs in substitution for the right to take tribute or free service, and though chiefs may in some cases still have sufficient influence to secure labour on their own lands, the practice appears to be decreasing in most of the British areas; it is, perhaps, only in the High Commission territories that it presents a question of any importance. It has been mentioned that in Northern Rhodesia the former right of the Barotse paramount chief to labour was commuted for an annual payment of £2,500.⁴ The salaries paid to chiefs in the French colonies are not given in lieu of tribute and

¹ Proclamation 74 of 1934.

² For general powers of chiefs, see Chap. IX, *passim*.

³ See Chap. IX, pp. 436-7.

⁴ *Report of East Africa Commission*, Cmd. 2387, 1925, p. 96. See Chap. IX, p. 458.

services: the question of services to chiefs remains of considerable importance in certain of the French areas.

The Geneva Convention of 1930 dealing with forced labour allows only chiefs who exercise administrative functions to enjoy personal services, if they do not receive adequate remuneration in other ways, but necessary provisions must be made to prevent abuses. It also permits this class of chiefs to levy compulsory labour for the execution of public works of direct interest to the community, subject to special safeguards, but at the same time it provides that this form of compulsory labour is to be progressively abolished, and prohibits chiefs who are without administrative functions from using it in any case.¹ The report prepared in connexion with the convention drew attention to the possibility of the misuse of their powers by the chiefs, for instance in the employment of customary labour in growing crops for sale; it referred to the attempts made by the Ruanda-Urundi administration to direct the use of this labour to social ends, such as the construction of roads, and recommended that these principles should be adopted for general use.²

(b) *Labour for Communal Purposes*

Passing now to the uses which have been made of the customary practice of supplying labour for the common purposes of the tribe, it was perhaps natural that the early administrations should see in the use of this 'communal' labour an easy method by which to provide for the making of roads or for the transport necessary for official purposes. It became, indeed, the usual method of securing labour for official or public needs; the procedure took the form of a notice to the chief to provide labour, and the purposes for which such labour was required seemed to carry their own justification. There were special cases in which the practice rested on a more definite basis than this general assumption; thus in the more developed conditions of the Buganda kingdom the construction and maintenance of roads was a recognized duty falling on the community, and the Buganda Agreement of 1900,

¹ International Labour Conference: *Forced Labour Convention*, 29 (1930), Article 7.

² International Labour Conference, Twelfth Session, 1929: *Forced Labour Report and Draft Questionnaire*, pp. 141, 293.

in allowing the chiefs to call on peasants to provide thirty days' *luwalo*,¹ or communal labour on the roads, merely gave a precise form to this obligation. For the most part, however, the construction of the early road system of Africa was effected by the use of unpaid labour obtained without recourse to formal obligations of this type.

It is, of course, the fact that at certain stages of social development the use of 'communal' labour for making and maintaining roads has been almost universal. In England the well-known Act of 1555² enlarged 'an ancient and customary service' by placing a statutory obligation on the parish, where each resident was obliged to render Statute Labour and Team Duty, the limit being six days' free service. The practice of fining those who failed in their duty gradually gave way to a general usage of commutation, but it was not until 1835 that the formal obligation to render statutory labour was abolished in England. In Scotland it lasted till 1883. France had in the same way its spring and autumn *corvée*; Turgot attempted to abolish compulsory work on the roads in 1762, but the peasant preferred service to taxation, and the system of *prestation* is still in force, the limit being three days' service, commutable to tax at option. In Africa, labour for the making of inter-village paths and local earth roads was for the most part easily obtained; it was only later, when requirements increased, as, for instance, for roads suitable for motor traffic, and when the growth of the habit of wage-earning caused a demand for unpaid labour to be resented, that regulations were made which prescribed such labour as obligatory, and defined its scope. Typical regulations of this kind were those adapting the *luwalo* system of Buganda to the needs of road-making in other parts of Uganda, or the Kenya Roads in Native Reserves Ordinance of 1910, which provided for a shorter period of labour than the Uganda rule, or the Belgian Congo decree of December 5, 1933, restricting the use of labour of this type to village purposes, which term, however, was held to include the building of village rest-houses and schools. It is not necessary to describe in detail the regulations passed at this stage; they existed side by side with other regulations designed to secure labour for major public

¹ See Chap. X, pp 575-6.

² 2 & 3 Philip and Mary, ch. 8.

works, including the construction of railways, and it is not always easy to distinguish the operation of this dual series of regulations. With changed conditions and an improvement in the standards of rule the original regulations have, as will be seen, been modified in the direction both of limitation of scope and definition of purpose.

(c) *The Use of Compulsory Labour in the past for Purposes other than Communal*

It has been mentioned that, while utilizing 'communal' labour for the purpose of making roads, the administrations had found themselves at the same time under the necessity of taking steps to secure a supply of labour for state purposes, such as the construction of railways, or major roads for long-distance transport, which were outside the range of even an extended definition of communal labour, more especially since they at times involved the absence of labourers from their homes for considerable periods. Labour so requisitioned was, however, distinguished from 'communal' labour in that it was remunerated. The use of impressment has not, of course, been confined to Africa; it was, for instance, at one time a recognized practice in French Asiatic colonies and in British India, though in the latter case it was practically confined to securing transport for military purposes. It must be recognized that the construction of railways would have been impracticable in Africa without some use of compulsory labour. The building of the Uganda Railway necessitated the use of labour imported from India; in 1885 the French Government was driven to import Annamites for work on the communications near Brazzaville; it brought labour from Cuba in 1909, and on at least two occasions attempted the importation of Chinese; labour was employed by the Congo Free State for the Lower Congo Railway from countries as far apart as China, the Barbados, and Liberia. Apart, however, from the expense involved, health conditions made it impossible to rely on a general recourse to labour of this type, and the use of impressed African labour became in many areas imperative.

The construction of railways affords the most conspicuous instance of needs which were held to justify impressment, but

administrations sometimes required labour for works of other kinds, and powers were taken in a variety of forms to secure it. In French West Africa, labour for the Thiès-Niger, the Cotonou, and Dahomey Railways was secured by an executive order directed to the chiefs, and in French Equatorial Africa the demands for the Brazzaville Railway were met by the issue of a series of local *arrêtés* which distributed the levy by districts. In the French Cameroons labour for the extension of the railway which the Germans had constructed as far as Njock, and for harbour and road construction, was secured by a system of 'collective contracts' with chiefs, a system which was justly criticized as involving an extreme form of compulsion; in Togo it was levied under instructions issued by district authorities. In none of these cases, therefore, were any legislative safeguards provided. In the Congo Free State the decree of 1906 authorized the carrying out of public works by the second section of the annual levy of the militia, the provision being that the workers could be called upon to perform a maximum period of two years' service. A large number of labourers was secured by these means for the construction of the Great Lakes Railway. The decree of February 16, 1910, passed after annexation, was designed to reduce the period of service of these workers, and the repeal of the decree was implied by the terms of the decree of May 10, 1919, which provided for the reorganization of the *force publique*, but made no reference to the use on public works of persons conscripted. Meanwhile, however, labour was secured by a process of official recruitment which had in practice most of the elements of impressment. The system had many abuses, and a proposal was put forward by the Minister of the Colonies in 1926, and approved by the *Conseil Colonial*, to regularize by law the levying of labour for the Leopoldville-Matadi Railway, but this was rejected by the Belgian Government as contrary to the *Charte Coloniale*. Though the government had thus refused to sanction a formal impressment, the informal levying of labour continued until the completion of the railway.

In the British areas the Natal Native Code allowed for the use of compulsory labour, which was widely used on the roads until this provision of the Code was abolished in 1906. In Uganda the

Native Authority Ordinance of 1919 regularized the use of compulsory paid labour (*kasavu*) for sixty days in the year, and was widely applied in the construction of the road system; a similar statute in Kenya, the Native Authority Ordinance, 1922, allowed the use of compulsory paid labour for the same period for works sanctioned by the Secretary of State; under this ordinance labour was secured for the Uasin Gishu Railway, and it was also extensively used on road work. Nyasaland passed a similar ordinance in 1924, but natives were exempted who had been 'fully employed in any occupation' for three of the preceding twelve months. In Nigeria the needs of the Baro-Kano and the Eastern Railways were supplied by the use of 'political' labour, a contingent being demanded from each province.¹ An effort to substitute voluntary labour broke down in 1924, and resort was again had to the use of 'political' labour.

The wide use made of impressed labour for railway construction in Africa has, in the past, led to many incidents which have reflected grave discredit on the administrations. There was, in many cases, a failure to provide either statutory safeguards regulating the use of impressment or the necessary supervision over recruiting operations; in other cases no precautions were taken to maintain the health on the journey to the place of work or during the stay there of the labourers so employed. The consequent suffering and dislocation of life were undoubtedly great. At a relatively late date, the death-rate in some cases, as on the Ivory Coast and the Matadi and Pointe Noire Railways, was exceedingly high; the mortality on the Uasin Gishu section of the Kenya Railway, though less in proportion, was for a time such as to attract much criticism in England. In the construction of the Thika-Nyeri and Yala-Kisumu railway lines, there was a noticeable improvement in the method of obtaining labour and the care of the employees. The cessation of railway construction since the depression period and the increase in the supply of voluntary labour, made possible by the improvement of motor communications, have resulted in the practical cessation of the demand for impressed labour for public works; and it is to be hoped that, should any occasion arise

¹ *Report by the Rt. Hon. W. G. A. Ormsby-Gore on his visit to West Africa*, Cmd. 2744, 1926, p. 133.

in the future for the use of large bodies of men, the lessons afforded by past experiences will not be overlooked. Every effort should be made to ensure the fullest possible resort to voluntary labour and the careful safeguarding of the conditions of any obtained by other means.

(d) *The Present Position in regard to Compulsory Labour.*

It is now possible to pass to a statement of the extent to which present-day legislation recognizes methods of compulsion in order to secure labour for communal or public purposes. The Union has no regulation which admits of the use of compulsory labour for administrative purposes, but, like other areas, it utilizes the labour of prisoners, including those convicted of tax default. In Natal the Locust Extermination Act of 1904 allows of an element of compulsion for this special purpose. The supply of any labour required for communal purposes is left to the operation of native customary law. In the British colonies Lord Milner's dispatch of 1920¹ laid down that natives might be required to perform certain paid work for government—namely, works of a public nature—subject to the express proviso that no native should be required to perform such work for more than sixty days in any one year, and that any native who was fully employed in any occupation, or had been so employed during the preceding twelve months for a period of three months, should be exempted from such labour. Mr. Churchill's dispatch of September 5, 1921,² supplemented these instructions in remarking that it had always been recognized that recourse should not be had to compulsory labour for government purposes unless this was absolutely necessary. It added that work essential to the life of the community must be carried on, and the administration must have the necessary powers to call out labour for essential services; for the future, however, the use of compulsion for other services than portage or transport must receive the prior sanction of the Secretary of State. A White Paper published in 1925³ showed that the Secretary of State had refused to sanction the further use of compulsory labour for the Uasin Gishu Railway; and added that experience had proved the inferiority of work under a system of compulsion,

¹ Cmd. 873, 1920.

² *Kenya*, no. 1353, 1921.

³ *Kenya: Compulsory Labour for Public Purposes*, Cmd. 2464.

which also tended to discount enterprise and progress by diverting attention from the possibilities of labour-saving machinery. The Joint Committee of Parliament appointed to consider the Report on Closer Union in East Africa noted that forced labour was still sometimes used on government work; while not denying that such labour is almost invariably in the interest of the natives themselves, the committee felt that the practice was no longer in accordance with the ideas of modern civilization, and should be discontinued.¹

The regulating policy in the British colonies and protectorates is now that laid down by the Geneva Convention of 1930, which was ratified by His Majesty's Government on June 3, 1931. Some details of the provisions of the convention are given later in this chapter.

In Basutoland and Swaziland the use of compulsory labour is confined to certain tribal obligations, but chiefs are, in practice, required to lend assistance in certain emergencies such as those arising from locust invasion. In Bechuanaland resort is had to the system of 'regimental labour' for tribal and government purposes; as has been mentioned,² the term 'tribal purposes' appears to have received a somewhat liberal interpretation. In Southern Rhodesia there is no law or recognized custom permitting the exaction of forced labour as defined by the Geneva Convention: the Native Affairs Act requires active co-operation in matters of public urgency, such as the destruction of locusts or the prevention of grass fires, and also provides that all natives shall comply with reasonable and lawful requests made by administrative officers as well as chiefs or headmen, which are to be made with due regard to native law and custom. The British report on the application of the Geneva Convention for 1936 states that no forced labour, as defined by the convention, was permitted in Southern Rhodesia in that year.

Similarly, in Northern Rhodesia the Native Authority Ordinance 9 of 1936 authorizes compulsory labour in cases of emergency, and for the maintenance of village roads; the latter provision presumably falling under the convention's definition of 'minor services'. In practice, requests are made by District Officers through the chiefs for portage or labourers for government purposes, but how far the labour may be described as forced

¹ H.C. 156, 1931, para. 106.

² See above, p. 610.

is doubtful. The Nyasaland Ordinance 11 of 1924 requires every adult male native to give labour for the construction or maintenance of any works of a public nature for the benefit of the native village or area. The labour is unpaid, but is limited to twenty-four days in any one year. The ordinance also sanctions the use of compulsory labour at the current rate of wage on works of public utility which have been previously approved for the purpose by the Secretary of State; labour can be required only from able-bodied adult males, and is limited to sixty days per annum. Administrative officers may also give orders for the supply of porters for official use, or for work for the benefit of the village in an emergency; the sanction of the Secretary of State is not required for the use of labour for these purposes. The British report for 1936, already referred to, states, however, that in Nyasaland no forced labour was employed otherwise than on minor communal services.

In Tanganyika the Native Authority Ordinance of 1926 authorizes native authorities to requisition labour, paid at the ruling rates, up to sixty days per annum for essential public services; and it also sanctions compulsory anti-famine cultivation. The Governor's Memorandum of March 1927 requires his consent before labour can be called up, with the exception of that required for portage or loading of steamers or repairs of bridges in emergencies. The annual reports show some variation in the use of these powers in recent years, due in part to the curtailment of public works on account of the depression, and also to the increase of motor transport. The British report for 1936 shows that 4,278 porters were requisitioned by government for 13,726 days, and 186 other workers for 1,516 days during that period, and that, on behalf of the native authorities, 325 porters worked for 548 days and 76 other workers for 1,455 days. Porters, if requisitioned, are paid at a fair daily rate, and the distance and load which may be required of them are severely restricted.

In Zanzibar the decree of December 4, 1923, which was similar to that of Nyasaland, was repealed by Decree 1 of 1931, whereby Zanzibar became the first of the tropical countries to abandon forced labour. In Kenya the employment of forced labour is regulated by Ordinance 42 of 1932, and in defining 'compulsory labour' due regard is had to the terms of the Geneva

Convention. The Governor may authorize administrative officers to impose compulsory labour on able-bodied men for government portage or public works only where voluntary labour is unavailable and the work is of direct interest to the community; other conditions include the exemption of certain classes of natives, such as school teachers, the limitation of the period of employment to sixty days, and rules regarding pay, feeding, and medical supervision. The British report for 1936 shows that forced labour in that year was confined to the employment of 2,698 porters for a total of 5,502 days. These figures may be compared with those for 1925, when some 15,240 men were employed on portage and other work at an average of five days each. In Uganda the Native Authority Ordinance empowers chiefs to require work (*luwalo*) from able-bodied males for the benefit of the community;¹ the period is limited to thirty days a year. The Governor may issue orders to chiefs respecting compulsory cultivation for relief work, and compulsion may be resorted to for portage or labour for public works; in the latter case, the sanction of the Secretary of State is required. The total period of work must not exceed sixty days. A Memorandum of 1923 laid down that forced labour could only be employed under narrowly defined conditions; in particular, it was not to be called out at harvest or seed time. The 1936 annual report states that no forced labour has been employed by the government since 1927. For the year ending September 30, 1936, however, 339,977 men, presumably *luwalo* labourers, were employed by the native administrations for a period of one month or less on public works, and 20,258 men were employed for short periods as porters. In removing such large numbers of men from the free labour market, the *luwalo* system depresses wages, and it is proposed to convert the obligation into a money-tax levy payable to the native administrations, the rate to be fixed first at 60 and then at 50 per cent. of the existing commutation rate; at present the option to commute is in force in every district except one.

In Nigeria the Forced Labour Ordinance of 1933 is the effective law regarding forced labour. It prohibits all forced labour as defined in the Geneva Convention except for transport purposes and as personal services for chiefs; the conditions in which such

¹ See Chap. IX, p. 450, and Chap. X, p. 576.

labour may be employed are those laid down by the convention. The Native Authority Ordinance allows native authorities to requisition native labour for public purposes and for any purpose approved by the Governor. The annual reports make no mention of the use of these powers. In the British Cameroons no forced or compulsory labour, as defined by the convention, has been employed recently, and the annual report for 1935 refers to an ample supply of voluntary labour. In the Gold Coast the relevant laws are the Gold Coast Colony Labour Ordinance of 1935 and Ashanti Labour Ordinance of 1935. Under this legislation Provincial Commissioners in the colony may require native authorities to maintain their roads; able-bodied men are liable for this service subject to a limit of twenty-four days a year, payment being made at local rates. Compulsory labour, as defined by the convention, however, is no longer employed in Ashanti or the northern territories, and in the colony it is regarded as a temporary expedient. The Gold Coast provisions have been applied to Togoland, but there is no evidence that they are now being used there. In Sierra Leone the Forced Labour Ordinance of 1932 regulates the rights of chiefs to engage forced labour. Labourers for personal or public services may be engaged for thirty days only. Personal services for the upkeep of chiefs' farms may be commuted for cash or for a share in the crops. As from December 31, 1935, the use of forced labour for road work has been abolished. In the Gambia the Forced Labour Ordinance of 1934 abolishes all forms of forced or compulsory labour as defined in the convention.

While forced labour is being progressively abolished in most colonies, or is being confined to the services excluded from the definition in the convention, it must be noted that a considerable amount of labour is available for government purposes, from tax defaulters or in lieu of payment of tax. In Tanganyika and Uganda natives may give their services instead of paying tax in cash; in these and in other colonies tax defaulters serve sentences of imprisonment in labour camps, and tax-relief schemes, such as that in Northern Rhodesia, allow natives to liquidate arrear taxes by working for government for a specified period. In Tanganyika, during the year 1936, the number of men performing labour in lieu of payment of tax was 31,605 employed for 1,285,352 days,

and in 1935, tax-relief schemes in Northern Rhodesia provided 4,626 man-months work.

In the Belgian Congo there is now, as has been shown, no law which permits the general requisition of labour for public works, but the decree of December 26, 1922, empowers administrative officers to requisition labour on payment as porters or paddlers; the period of employment must not exceed fifteen days a month or twenty-five days a year. Natives so requisitioned may provide substitutes at their own expense. The decree of March 19, 1925, further defines this authority, and local instructions, characteristic of the attention now paid in the Congo to labour policy, prohibit the use of portage where other means of transport are available, or for the carriage of certain classes of heavy goods. In addition, the decree of December 5, 1933, enables local officers to levy compulsory labour to combat infectious diseases or famine, or in other emergencies; this authority may also be used, though for the exclusive benefit of the inhabitants, for compelling the cultivation of foodstuffs or exportable produce. The period of employment is limited to sixty days a year. This agricultural levy must be preceded by a survey of local conditions, and sanction must be obtained to a definite scheme. The decree also allows the use of compulsion for cultivation for 'educative' purposes, a system to which further references will be made.¹ The Belgian Congo publishes statistics of the manner in which labour obtained from various sources is employed, but they do not distinguish that obtained under these regulations. During the depression period there was a temporary reversion to portage on a considerable scale; in normal times there is a wide use of motor transport. Road work is now mainly in the nature of maintenance, which does not involve the removal of natives from their homes to the same extent as does new construction. The local regulations allow of recourse to tax-defaulter labour, and in 1933 tax defaulters numbered 40,000, many of whom were used on road labour. In Ruanda-Urundi, as in the Congo, there is no law authorizing the use of forced labour for public works. The requisition of porters is regulated by an ordinance of February 28, 1935; 1,919 men were employed as porters in 1935.

¹ See below, pp. 633-4.

The general law relating to the use of forced labour in French West and Equatorial Africa is the decree of August 21, 1930. The use of customary labour for communal purposes receives less recognition than in some British colonies, but the decree allows compulsion for minor communal village purposes described as 'les travaux de village consacrés par la coutume de la collectivité intéressée et faisant partie des obligations normales de la vie de la communauté'. The decree avoids the expression *travail forcé* in speaking of forced labour, in view of its possible confusion with *travaux forcés* (penal servitude), and replaces it by the expression *travail public obligatoire*; this is defined as service for which any person has not offered himself voluntarily, exclusive of service arising out of military or fiscal obligations, and of sentences imposed by law; the only other compulsory service exempted from the application of the decree is compulsory service in emergencies (*force majeure*) and the communal services already mentioned. The extent of its use is to be determined by local regulation, subject to the condition that it is employed for the exaction of labour for works of public interest only. Regulations have been issued in French West Africa (two orders of February 18, 1933), and in French Equatorial Africa (order of May 29, 1933). The decree would presumably be resorted to only if occasion arose for the exaction of compulsory labour on major public works, such as railways. Special local regulations would be necessary which, in the terms of the decree, would require the sanction of the Colonial Ministry. There is no evidence that it is at present utilized, and it is recognized that obligatory labour should be replaced by voluntary labour as circumstances permit.

Where labour is required for public purposes the French administrations have depended in the first instance on the system of *prestation*,¹ which it is now proposed to abolish gradually in favour of a money tax; also reliance, though to a much smaller extent, is placed on the use of the *deuxième portion* of the forces conscripted for military purposes, and, as in other colonies, usage is made of tax-default labour. Some use also appears to be made of the law relating to *vagabondage*. The early law, dating

¹ See below, pp. 624-6.

from the abolition of slavery in 1848, placed *vagabonds* at the disposal of the state for employment on public works, and they are now treated as cases falling under the *indigénat* regulations.¹ In the French Cameroons and Togo, local *indigénat* regulations prescribe penalties for disobedience to requisitions made in emergencies or for 'essential public works': there are also rules defining the conditions under which portorage can be requisitioned.²

In the Portuguese colonies native labour conditions were formerly regulated by the decree of October 14, 1914. This reaffirmed the general principle of the obligation to labour, and effect was given to this in practice by the use of the sections of the Portuguese Civil Code, which punished vagrancy. A native not having a fixed place of abode or means of subsistence, and not habitually engaged in any profession, occupation, or trade, was liable to be required to work either for the public services or for a private employer. On failure to comply with these orders he was liable to be sentenced to 'correctional' labour. The duration of compulsory labour varied from three months to one year; that for correctional labour from 8 to 300 days. In addition, however, administrations had the right to requisition from chiefs the labour needed for works of public utility within the territories of those chiefs, in practice limited to the construction and maintenance of roads. A further regulation applied a system of *prestation* similar to that in the French colonies, which exacted labour dues commutable for a money payment. The details of these general regulations varied in the different colonies, but in every case the law prescribed that compulsory labour on state works should be remunerated at fixed rates, and provided with minimum standards of housing, clothing, and diet. Natives sentenced to correctional labour received only food and clothing. The basic law now in force is the Native Labour Code of December 6, 1928, which restricts the use of forced labour to public purposes for which sanction must be obtained from Lisbon; by the Order of April 11, 1930, all such labour must be paid. The *Decreto Lei* of November 15, 1933, reaffirms the authority to requisition labour for public works, and also for the production of marketable crops. There are no figures available for the use made of these powers. In Angola

¹ See Chap. VII, pp. 290-1. ² P. Daresté, *Traité de droit colonial*, 1932, vol. ii, p. 539.

the most recent regulation dealing with the system of *prestation* is *Portaria 1860* of 1935, which requires every adult male native to work five days a year on public undertakings; the labour may be commuted for a cash payment at rates fixed by local decree. Reference will subsequently be made to the facts relating to the recruitment from Portuguese territory of the large body of labour required in the Rand mines.

(e) *The System of 'Prestation' in French Colonies*

Prestation is a tax payable in the form of a definite amount of labour which is redeemable in cash. It provides a large amount of labour for public purposes, and also produces appreciable revenue; there are, indeed, some conditions in which the latter aspect tends to become almost as important as the former. It is applicable to all inhabitants, with certain limited exceptions, and is not a tax on natives only. Its character may be illustrated by a study of the terms of the *arrêtés* of January 1, 1934, November 9, 1935, and January 13, 1937, referring to Togoland. These lay down that the tax is due from all able-bodied males, whether European or native, between the ages of 18 and 50, exception being made in favour of various officials and students; the maximum term of labour is ten days. The cash equivalent for the purpose of redemption (*rachat*) is at the rate of 10 francs a day for Europeans, and from 1 to 3 francs a day for natives, according to the area in which they are resident. Labour may be utilized on roads, bridges, camps, telegraphs, works of public utility near towns, afforestation, local irrigation, and wells. The tax must not be levied during the harvest season, and schemes for the manner in which labour is to be used must be prepared annually and sanctioned by the *Commissaire de la République*. The taxpayer must be notified in advance of the task on which he will be engaged, and on its completion a receipt must be given to him. Disputes on any question relating to the tax are settled by the ordinary courts; chiefs may be given 10 per cent. of the collections of tax redemption by natives. Non-compliance by natives is punishable under the *code de l'indigénat*. The term of work in force in 1937 was two days in urban and four in rural areas.

In Togo the total of the *rachat* amounted in 1935 to 13,260

francs for Europeans and for natives 2,300,000 francs, as against a total native tax of 2,900,000 francs. In the French Cameroons the total *rachat* in 1935 was 565,000 francs as against a total native tax of 24,942,000 francs; and the labour was stated as 3,269,715 man-days, utilized as to 49 per cent. on roads, 11 per cent. on public buildings, 11 per cent. on their upkeep, 14·5 per cent. on health services, and 14·5 per cent. for 'miscellaneous purposes'. In French West Africa the *rachat* amounted in 1933 to over 5,000,000 francs. The amounts of *rachat* in each case vary year by year in relation to the state of prices; thus in Senegal it amounted to 834,000 francs in 1930, and to 240,000 francs in 1932. The terms of the regulations in force in other territories vary considerably from those in Togoland. The maximum period of labour throughout French West Africa varies from 3 to 9 days; in French Equatorial Africa it was fixed by an *arrêté* of December 28, 1936, at 12. In French West Africa *prestation* labour is everywhere redeemable, but in French Equatorial Africa redemption is restricted to certain groups.

Viewed as a tax, the *prestation* is supplementary to the direct native tax, and its burden must be judged in relation to the total incidence of taxation. Viewed as a method of obtaining labour for public purposes, it has incurred considerable criticism. The French have not been the only government to make use of it. The German Government had imposed a tax in the form of labour in Togoland and the Cameroons, the period being twelve days in the former and thirty in the latter; in both cases it was open to redemption. In the early days of the Congo Free State a *prestation* was introduced for the benefit of the state and of concessionaires; as shown elsewhere, its abolition was among the first of the reforms which followed the annexation of the Congo. The system now in force in the French colonies had, as has been shown, its origin in the law of France itself. The criticism against its use in Africa turns partly on considerations of principle, partly on the ground that it admits of abuse in practice.

On the question of principle, the use of compulsory labour for purely government purposes has, in the view of its critics, given the *prestation* the character of a *corvée* in which the native can see no benefit to himself; they point, in particular, to its use in constructing

main roads or aerodromes, and at one period there were French administrators who suggested the advisability of restricting its use to purely native purposes.¹ In regard to practice, it is clear that there has in some areas been considerable laxity in observing the rule restricting the period of employment, all the more because the construction of the road system has, in the French colonies, been left mainly to the administrative staff, with a financial provision seldom fully adequate to the work expected of it. Women and even children have been required to work, presumably instead of their men relatives.² Again, the system is clearly liable to abuse by the chiefs who prepare the *prestation* lists. These remarks apply in particular to areas in which the observance of the *prestation* regulations is not carefully controlled; where supervision is adequate, as in French Togo and the Cameroons and the more advanced parts of French West Africa, the system is less open to objection. The question whether the system of *prestation* could be considered as compatible with the terms of the mandate has been discussed by the Temporary Slavery Commission³ and the Permanent Mandates Commission,⁴ but these discussions have reached no definite conclusion, as it has been found difficult to discriminate clearly between forced labour as prohibited in the mandate, and forced labour as part of a system of taxation.

In the past the French government has maintained that the system is traditional in Africa and appropriate for the earlier stages of economic development.⁵ An administrative inquiry has, however, been undertaken, with the object of replacing the system in French West Africa, and possibly later in French Equatorial Africa, by a money tax which will enable the work formerly done with *prestation* labour to be performed by paid voluntary labour, and the Governor-General, M. de Coppet, announced in a speech in November 1937 that an experiment would be made in 1938 on these lines in some thirty districts.⁶

¹ 'Régime des Prestations en A.E.F.', *Bibliothèque administrative*, no. 5, 1925.

² *Discours du Gouverneur-Général à l'ouverture de la Session du Conseil de Gouvernement*, Nov. 1937, p. 13.

³ *Minutes of the Second Session*, July 1925, p. 74.

⁴ League of Nations Permanent Mandates Commission, *Minutes of the Sixth Session*, 1925, pp. 16-20; *Minutes of the Tenth Session*, 1926, pp. 170-1.

⁵ *Journal officiel*, April 7, 1927, p. 1649.

⁶ *Discours du Gouverneur-Général*, 1937, op. cit., p. 13.

(f) *Military Conscripted Labour*

Labour conscripted under military regulations was at one time in use in the Belgian Congo, but military 'requisitions' are now confined to securing labour for moving, housing, or feeding the military forces. The system now seems to be a feature peculiar to the French colonies. The use of 'military' labour may be traced back to the period when the French looked to their colonies to provide a reserve of man-power for their military forces. The use of African natives in the army was an active political issue in 1908; the budget of 1910 adopted Ponty's formula of 20,000 *tirailleurs* in four years; and the demand grew until in 1922 the Army Commission foresaw the possibility of a draft of 60,000 men a year from West Africa. The two Governors-General of the time, M. Van Vollenhoven and M. Merlin, pointed out that this would involve a continuous withdrawal of 180,000 men, and in view of the shortage of men for internal development such a utilization of man-power would have the effect of economic self-annihilation. The demand was accordingly reduced, but recent events have suggested that measures should be devised for raising the number of African recruits, and preliminary consultations to this end have already taken place.¹ Under the present system, conscripts who are selected after medical examination as fit for service are divided by the *tirage au sort* into two categories: the first serves with the colours for three years (the *service actif*); the second, or *deuxième portion*, is again divided into two parts, the *travailleurs effectifs* and the *travailleurs libres*. The former are employed on a special class of public works, such as railways, irrigation schemes, and military and other buildings; they remain under military discipline and have much the same conditions as to food and housing as soldiers with the colours, being paid 75 centimes a day. The second class constitutes a reserve which may be called up if required. At one time 10,000 men were engaged; there were in 1934 some 3,600 in French West Africa, mainly on the Niger development works. The system of employing the *deuxième contingent* on major public works was most fully developed in Madagascar, but it is of interest, as

¹ *The Times*, May 18, 1938.

showing the tendency of French colonial labour policy, that the use of military conscripted labour in that territory has recently been abolished.

(g) *Some General Conclusions*

The general movement has been towards a clearer statement of the objects for which forced labour can be utilized, the legal definition of the powers of public authorities, and the more general resort to voluntary labour for major public works. But it has been recognized that, whatever the strength of the arguments against the use of forced labour for public purposes, the logic of facts is in some cases decisive; if, for instance, portage was to be ended, roads must first be constructed, and they could not in every case be made without the use of forced labour. As a French author has put it: 'il est possible que la génération indigène actuelle ait à souffrir de cette contrainte. Mais les générations à venir pourront en être affranchies.'¹ The proceedings leading to the Convention of 1930,² which dealt specifically with forced labour, contain valuable material on the use made of compulsion in the past, and on views held as to the circumstances in which it can be justified. It was generally realized that, apart from any grounds of equity or humanity, labour done under compulsion was uneconomic and had unfortunate social consequences; the discussions, as compared with those of the Convention on Slavery of September 1926, showed a substantial advance of opinion as to the undesirability of using methods of compulsion.

The Convention of 1930 defined forced labour as all work or service which is exacted from any person under the menace of penalty, and for which such person has not offered himself voluntarily. It exempted from this definition labour impressed in cases of emergency, and labour for minor services in the direct interest of the community, also compulsory military service and service exacted from persons as a consequence of a conviction in court, provided that they are not hired to work for private persons or companies. The provisions of the convention with regard to labour for chiefs have already been mentioned. Further provisions re-

¹ P. Daresté, *op. cit.*, p. 536.

² International Labour Office, *Report on Forced Labour*, 1929.

quire that forced labour for the transport of persons or goods, while tolerated for the time being in the case of government or urgent needs, shall be abolished within the shortest possible period, and that recourse to compulsory cultivation as a precaution against famine shall only take place when the produce remains the property of the community producing it; it would, however, allow work demanded by law or custom where production is organized on a communal basis and the produce or profit accrues to the community. Of the states governing territories in Africa, France, Great Britain, Italy, Liberia, and Spain have ratified the convention, and a Bill for ratification is before the Belgian Parliament. The French ratification and the proposed Belgian accession make reservations on certain points, the most important of which relates to the article of this convention restricting the use of compulsory cultivation to cases of famine, as both countries attach importance to compulsory cultivation as a method of educating natives in the production of economic crops.¹

It would be difficult, and it would also be unsafe, to generalize as to the extent to which the restrictions placed by legislation on the use of forced labour for public purposes are observed in practice. Here, as elsewhere, the spirit of the administration, and the traditions of its personnel, count for much. There is, it may be said, a difference observable between the degree of supervision exercised over the use of this type of labour in the mandated areas and that seen in some of the other African territories. It is of some importance to note that observations conducted during a period of depression of prices, when public works are curtailed and voluntary labour is freely forthcoming, are apt to leave a different impression from that formed at a period of higher prices and of administrative activity. Portage now constitutes the most conspicuous form of demand for forced labour. It has been abolished in Gambia and the Gold Coast and restricted by law in the Belgian Congo² and in Tanganyika;³ in nearly every territory the administration is able to count on the progressive effect of the development of motor communications in reducing the need for

¹ See pp. 630-5.

³ Tanganyika Ordinance 18 of 1928.

² See p. 621.

portage.¹ Though some abuses of authority still exist, there is a consistent movement in all territories towards a more efficient regulation of the use made of forced labour, and the substitution of voluntary labour.

III. COMPULSION FOR THE STIMULATION OF NATIVE AGRICULTURAL PRODUCTION

The use of compulsion as a means of stimulating agricultural production has been represented as having an analogy with the customary exaction of services for securing the common subsistence of the community. In truth, the connexion is at the best slender; in its present form the practice reflects the views of modern administrations as to the extent to which some sections of the African people, who have not come under the influence of the economic incentive, may need to be subjected in their own interest to a stimulus of another character. The view that constraint of this nature is justifiable was implicit in Lord Milner's dispatch of 1920, to which reference has already been made;² but it finds its clearest expression in the proceedings of the Conference of Governors of the East African dependencies in 1926.³ 'Steady progress', they said, 'cannot be secured in some areas unless every able-bodied native who shows no tendency to work is given to understand that the Government expects him to do a reasonable amount of work either in production in his own reserves or in labour for wages outside it.' The imposition of *travail public obligatoire*⁴ has been viewed in France more simply as a reminder to the native of the duty which he, as well as the European, owes to society; and much the same spirit inspires the instructions issued by the Belgian Colonial Ministry on September 28, 1934: 'Le peuple colonisateur manquerait à son devoir si, sous le prétexte, du reste fallacieux, de respecter la liberté de l'indigène, il reconnaissait aux noirs . . . le droit de vivre ou plutôt de végéter dans la paresse.'⁵

Mankind at large seldom interests itself in the principles underlying a law until it finds its application irksome, and to the African

¹ See Chap. XXIII, p. 1539.

² See above, p. 616.

³ *Summary of Proceedings*, pp. 13-17.

⁴ See above, p. 622.

⁵ *Annuaire de documentation coloniale comparée*, 1934, vol. i, p. 179.

native the operation of the regulations for increasing production is doubtless of more interest than the principles on which they are held to be justified. There is a marked difference in the policy adopted under different colonial systems. Where definite powers have been taken in the British colonies, they are confined to the use of compulsion for the planting of food crops as a precaution against scarcity. Some reference has already been made to these regulations; typical cases are those of the Northern Rhodesia Ordinance 9 of 1936, which allows of compulsion for the planting of food if famine threatens, the similar clause in the Native Authority Ordinance of 1926 in Tanganyika, and the Native Authority Ordinance of 1919 in Uganda. When no definite powers are taken, the general provisions of the ordinances regarding the use of 'communal' labour for the benefit of the community have been available. Considerable use has been made of these provisions during the periods marked by drought conditions; and they have also been resorted to in cases where, as in some parts of Tanganyika, the expansion in the growth of marketable crops has seemed to be leading to a dangerous reduction in subsistence crops. It is probable, however, that there has seldom been any necessity to resort to legal compulsion; the influence of the administration must in most cases have enabled it to secure compliance with orders clearly directed solely to the protection of the community itself.

The British colonies have not taken legal powers to stimulate the production of marketable crops. That stimulus has been applied is not open to question; the expansion of the cotton and coffee production in East Africa was not at the outset left entirely to the influence of the economic incentive. The 'moral pressure' applied to the cultivation of cotton in Uganda and Nyasaland has been officially recognized.¹ The Governor of Tanganyika in his circular of August 25, 1925, defined the policy as follows: 'As soon as it is shown to the satisfaction of the administrative officer that a body of natives desires to grow economic crops for sale or export, he should assist them in every way to do so. If he finds,

¹ *Report of the East African Commission*, Cmd. 2387, 1925, p. 34; *Report on the Formation of a Native Agricultural Board*, Sessional Paper 1, 1930. See also *Report of Committee on the Supply and Welfare of Native Labour in the Tanganyika Territory*, 1938, p. 14.

however, that a particular community turns a deaf ear to his exhortation to them to adopt some active form of work, it will be his duty to use every legitimate means at his command to induce them to take up the cultivation of economic crops.' In certain conditions there can be little difference between the giving of advice and the issue of an order; there is, however, a substantial distinction between a general direction to increase production, and the issue of an order prescribing a definite task, supported by a threat of penal sanctions. Whether a more direct use of the latter method would have been of general advantage is a question of policy which need not be examined here; it is enough to say that it is not a policy which has been pursued in the British African colonies.

Passing to the French territories, it is not now necessary to dwell on the earlier history of French Equatorial Africa, which presented many features similar to that of the Congo Free State, in that compulsion, supported by legal sanctions, but also dependent largely on the use of extra-legal methods, was one of the most mischievous features of the 'concessionnaire' system. Compulsion was, however, in this case directed to the collection of forest produce rather than to the extension of cultivation; where, like M. Lamblin in Ubangi-Shari, authorities used compulsion to extend the planting of rubber by natives, it was largely in order to provide a means which, while allowing the native to satisfy the state tax, would take him out of the range of the compulsion exercised by 'concessionnaires' for their own profit.¹ The régime was specially characteristic of French Equatorial Africa; the history of French West Africa was marked by few incidents of this nature. A local circular of April 21, 1912, which made obligatory the growing of cotton, was of a different character. The more modern policy of the French colonies is that embodied in the general decree of August 21, 1930, which confines the use of 'obligatory' labour to provision against scarcity or *pour des fins d'enseignement agricole expérimental*, the latter provision being clearly designed to apply to the growing of marketable crops. There appears to be little resort to the use of penal sanctions in carrying out this policy, but that the recent increase of coffee in the

¹ A. Gide, *Voyage au Congo*, 1927, p. 79.

Cameroons, and cotton in French Equatorial Africa, is due in considerable part to official stimulation must be clear to every observer, though there may be the same difficulty, as in the British colonies, in drawing the line between persuasion and compulsion. In the French areas there has of late years been in force a definite scheme of development in pursuance of the policy of *mise en valeur* described elsewhere;¹ and the interest of the administration of French Equatorial Africa in the local development of marketable crops is evidenced by the regular attendance of the *garde de cercle* when the ground is being prepared. The large extension of ground-nut cultivation in French West Africa is, on the other hand, due rather to the activity of the *Sociétés de Prévoyance*, and the influence of the economic incentive, than to direct pressure from the administration.²

The Belgian Congo has made a marked use of the practice of compulsory cultivation. The home government formally sanctioned the use of the system in 1917, the produce being bought directly by government and either exported or sent to the industrial area of Katanga.³ The method was justified as providing the only answer to the problem which the Colonial Minister expressed in the words 'comment développer l'agriculture sans cultivateurs actifs?' The system finds a place in a statute of the territory,⁴ which lays on the *circonscriptions indigènes* the obligation to maintain sufficient subsistence crops, and also 'des cultures de vivres ou de produits d'exportation imposées à titre éducatif'. Such cultivation must, however, be in the exclusive interest of the population, and the power of sale must be unrestricted. When this decree was considered by the *Conseil Colonial* in 1933 it produced an interesting discussion as to the period up to which compulsory cultivation⁵ for marketable crops could properly be regarded as 'educative'. There could obviously be no definite line of demarcation, but it was concluded that every effort should be made to work for the cessation of compulsion by demonstrating to the native the value to him of improved cultivation. In practice the rules lay down for each district a prescribed number of acres of

¹ See Chap. V, pp. 139-40.

² See Chap. XXI, pp. 1477-80.

³ E. Leplae, 'Méthode suivie pour le développement de l'agriculture au Congo belge', *Congo*, Oct. 1930. See also *Congo*, May 1933.

⁴ Decree of Dec. 5, 1933.

⁵ J. Magotte, *Les circonscriptions indigènes*, 1934, p. 126.

subsistence crops, and observation shows that much use is made of these rules both in the Congo and Ruanda-Urundi.¹ Obligatory cultivation of marketable crops has been utilized mainly for the extension of cotton and to a lesser extent of coffee. There is no doubt that direct compulsion has been widely used, and there have been in some districts many convictions in recent years for non-compliance with the obligation to grow cotton. This type of labour is included among those covered by the decree regulating the use of compulsion,² which limits the obligation to sixty days, but in the case of agricultural work such a limit is clearly difficult to apply. Observation of the cotton cultivation shows that in some areas, where in the first instance it was grown 'collectively' under the direction of chiefs, individuals now come forward readily to take seed. The administration has arranged that the cotton companies shall pay a fixed price for cotton, and interest has been stimulated by allowing a portion of the price paid to be given to the *caisse de chefferie* for road repairs and the like. The sale cannot be said to be free, as each company has a monopoly for the purchase of cotton within its zone of operations, but it would seem probable that, if compulsion were withdrawn, a considerable proportion of the area now under the crop would continue to be cultivated.

The merits of the application of compulsion as a stimulus to native cultivation are not easy to assess on grounds of principle. It offends against the sentiment of individual liberty; but modern Europe is increasingly prepared to regard the claims of individual liberty as being strictly relative to the social needs of the community at large. The obligatory growth of marketable crops is, however, in practice liable to two objections. The extent of the market available may be miscalculated; that has happened on more than one occasion and has created an embarrassing situation for the local administration. In the Belgian Congo the government has endeavoured to meet this danger by fixing the price of cotton at a figure which can be maintained over a course of years in spite of market fluctuations; but that procedure can only be followed

¹ For a detailed description of the rules in the Equatorial Province see M. Mottouille, *Le problème de la main d'œuvre au Congo belge*, 1931, pp. 92 ff.

² See above, p. 633.

if the state has a definite control over the operations of marketing companies, and it necessarily involves that the price given is often below the current market value. It has been stated that in Uganda the natives believe that government fixes the price of cotton, and when it is low that they are being deliberately oppressed.¹ The other objection is perhaps the more serious of the two. The native is still only a producer; the marketing of an exportable crop must in present circumstances rest with non-natives, and unless the administration is conducted in a spirit of sufficient detachment there will always be some danger that compulsory production may be made to serve private commercial interests. The close connexion established with the cotton companies provoked criticism of the Congo system in the Belgian Chamber at the session of July 14 and 21, 1932. The Portuguese system, which allows officials to hold a share in private enterprise in the colony, inevitably lays the use of 'educative compulsion' open to suspicion, and critics have remarked on the fact that Belgian officials in the past have on retirement frequently accepted posts on the directorate of companies operating in the Congo. Where, however, the procedure of compulsory cultivation can be adequately safeguarded, the system is not without advantage as a preliminary to the establishment of the normal economic incentive.

IV. LABOUR IN PRIVATE EMPLOYMENT: EVOLUTION OF THE PRESENT POSITION

(a) *The Historical Background*

If in Africa there is now little use of direct pressure by government in order to secure labour for private employment, this was a marked feature of policy in the past, and discussion of the methods used has been a prominent topic in colonial literature.² The use of pressure has not been universal, and it has been most marked in

¹ L. P. Mair, *An African People in the Twentieth Century*, 1934, p. 151. See also I. C. Greaves, *Modern Production Among Backward Peoples*, 1935, p. 199.

² For a comprehensive study of the question of industrial and urban labour in South Africa, see Dr. Charlotte Leubuscher, *Der südafrikanische Eingeborene als Industriearbeiter und als Stadtbewohner*, 1931.

territories in which European colonization, or the rapid extension of mining, has created a demand which the offer of wages could not supply. A complete history of this aspect of labour development would comprise the use of means so various as slavery, direct statutory compulsion, pressure through the imposition of personal tax, the curtailment of native lands, assistance given by administrative officials to the efforts of private recruiters, and the use of chiefs to recruit their people as labourers. For the present purpose, however, it is sufficient to give only so much history as will describe the background from which existing conditions have evolved. If it is necessary to include in the review some mention of slavery, it is because it had an influence both on the attitude of the native towards wage-earning and on the early policy of colonists in obtaining labour. In those parts of Africa where domestic slavery was a recognized institution, the native's first experience of working regularly for others was in the form of slavery, and it carried with it the demoralization which usually characterizes the use of forced labour; the heritage of slavery is irresponsibility and lack of forethought.

(b) *South Africa*

In South Africa the traffic in slaves was abolished with the Act of 1807; but its influence continued to be felt in the relations of white colonists and native labour. Theal, the South African historian, has observed that it was largely the system of Negro slavery which caused early colonists to regard the native as the hewer of wood and drawer of water.¹ Africa was not the only heir to the legacy left by slavery; almost every country which came into contact with the slave trade felt some of its influence, though it has been observed that this was generally less marked in Latin countries than in others. Historians of the Industrial Revolution in England have remarked that the influence of the slave trade was seen in the spirit in which the new industrialists of North and Midland England approached the treatment of labour in their mines and cotton mills. The employment of Poor Law apprentices in the English factories had many points in common with the

¹ For a somewhat different view see J. F. W. Grosskopf, *Report of the Carnegie Commission on the Poor White Problem in South Africa*, 1932, part I, p. 170.

system of apprenticeship under which Hottentot and Kaffir adults and children were secured by Boers in large numbers for farm labour, or with the early use of the Masters and Servants Acts in the Union. Some observers have considered that 1717 was a crucial date in South African history, for it was then that the Dutch Company rejected the advice of Dominique de Chavonnes to rid the colony of slaves and establish an economy based solely on white labour.¹ The decision was momentous, though the lines which the development of the Cape might have taken, had the advice of de Chavonnes been accepted, are a matter of conjecture. There has, perhaps, been in some quarters a disposition to exaggerate the influence of slavery on the later developments of South African policy towards the native; but it can justly be held to have made some contribution to the tradition which the report of the Transvaal Indigency Commission of 1906-8 described as the 'pernicious theory that the line between white man's and black man's work should coincide with the line between skilled and unskilled labour'. Further, if slavery has contributed to produce the longstanding prejudice against manual labour, branded from early times as 'Kaffir work', it has had some share in accentuating the problem of the poor whites in the Union, which to-day is the focus of many of its economic and social questions.²

The earlier use of apprenticeship and similar laws in the Union was directed to securing labour on the farms; and the supply of farm labour was the issue on which discussions regarding the merits of the reserve policy mainly turned.³ With the discovery of the diamond- and gold-fields fresh demands arose; the wages offered were on a more liberal scale than the farmer could afford, but from the first failed to attract a sufficient supply of local labour. There is evidence that pressure was exercised through the chiefs in Zululand, Bechuanaland, and Basutoland to secure recruits; and it is clear that the existence of the native poll tax was a powerful influence in stimulating recruitment. Though it does not appear in the first instance to have been imposed only with this object in view, there were cases in which its incidence was

¹ E. A. Walker, *A History of South Africa*, 1928, p. 79.

² See below, pp. 684-7.

³ See Chap. XII, pp. 803 ff.

raised with the definite purpose of securing labour; thus Natal in 1857 raised the hut tax from 7s. to 11s. a year on natives who were not working for Europeans. It is also true that the need for its maintenance in the interests of recruiting was an effective argument against its reduction, and ensured an extreme rigidity in its collection. The European trader, who held the monopoly of trading licences in the reserves, became in his turn an effective auxiliary in the work of recruitment.

The endeavour to secure local Union labour for the mines was one of the dominant factors in the policy underlying the Glen Grey Act of 1894. By substituting a system of individual tenure for the collective system of the reserves, Rhodes hoped, in his own words, to supply to the surplus population a 'gentle stimulant to go forth and find out something of the dignity of labour'.¹ Any native not in possession of land under the new system was to pay a tax of 10s. a year unless he could prove that he had been in employment three months out of twelve beyond the borders of the district. In 1903, however, the committee which considered the working of the Glen Grey Act found the labour clause prejudicial to the extension of its land clauses, and it was repealed in 1905. No further efforts were made to secure labour by direct pressure of this nature, and the Union turned its attention to the possibility of augmenting its labour supply by external recruitment. Natal, where the shortage of labour in the sugar fields constituted a special case, had resorted as far back as 1860 to the use of indentured Indian labour;² in 1896 the Portuguese Government authorized recruiting for the gold mines, and an agreement of 1901 between the two governments regularized the organization of the recruiting agencies. The acute labour crisis in the mines after the South African War led in 1903 to the short-lived experiment of the importation of Chinese labour; increased importance was attached to recruiting from Portuguese areas, and beginning with 1909 a series of conventions on the subject was concluded with the Portuguese Government.³ Though, of course, the Union cannot be held directly responsible for the fact, it is

¹ Quoted by L. C. A. and C. M. Knowles, *The Economic Development of the British Overseas Empire*, vol. iii, 1936, p. 321.

² See Chap. VIII, p. 319.

³ See below, pp. 652-3.

generally agreed that recruitment in Portuguese areas has involved some element of compulsion, though its exact degree is not easy to determine. Reference has already been made on page 623 to the use made of the decree of October 14, 1914, which authorized the government to place natives, not otherwise employed, at the disposal of colonists or merchants; as will be shown on page 650, below, this law is not now in force. It has at the same time been suggested that, owing to the conditions then prevailing in Portuguese territory, natives readily accepted service in the Transvaal mines; it is certainly the fact that there was, after the War, a marked exodus from the Portuguese territory into Tanganyika and Nyasaland. Figures will be given¹ showing the total extent to which the Union now relies on external recruitment; so far as local recruitment is concerned, it now depends on ordinary economic inducements, reinforced by the influence of the direct native tax and the inadequacy of the lands reserved for native occupation.

(c) *British Colonial Dependencies*

In the British colonial territories there has been less disposition to assist recruitment by the adoption of methods outside the normal incentive of wages. But the poll-tax has also been a contributing, and in some circumstances almost a determining, factor in that incentive; there are few studies dealing with the effect of labour developments on native social life which do not call attention to its influence. In stating that taxation is a major cause of labour emigration the Nyasaland Committee on Labour Emigration of 1935² confirms an experience of which there have been numerous proofs elsewhere. At the same time it remains true that the tax has not in the British colonies been imposed with the deliberate intention of stimulating a supply of labour: official opinion has always expressed itself as opposed to the policy of utilizing the tax as a direct means of assisting recruitment. The Kenya Labour Commission of 1912-13³ held that 'taxation is unjustifiable as a means of increasing the labour supply'; and the same view was taken later by the Governor of Tanganyika:⁴ 'coercion of labour

¹ See below, p. 652.

² *Report*, p. 131. See I. Schapera, 'Labour Migration from a Bechuanaland Native Reserve', *Journal of the Royal African Society*, vol. xxxii, 1933, pp. 386 ff.

³ *Report*, p. 329.

⁴ Colonial 19, 1926, p. 10.

by pressure of direct taxation is little, if anything, removed from coercion of labour by force'.

Where labour policy has in the past been a prominent issue, it is mainly in connexion with the demands made by employers for official aid in recruitment. These demands have arisen in the most marked form in Southern Rhodesia and Kenya. Whatever the truth of the allegation that officers of the Chartered Company used undue pressure to secure labour for the mines in Southern Rhodesia, the Secretary of State deemed it advisable in 1901 to forbid the use of direct or indirect pressure, though in 1907 he varied his instruction so far as to allow officers to 'advise' natives to go to work. A Native Affairs Committee of 1910-11 was opposed to allowing officials to show any interest in recruitment: as they said, 'advice' which was rejected would bring a loss of prestige which could only be cured by resort to compulsion, and this view was officially endorsed by the Governor in 1925. In Kenya the question attracted almost continuous notice between 1907 and 1928. The 1907 Labour Rules, which laid down that officers should do their best to supply labourers for settlers and planters, so long as they treated their labour properly, were resented by settlers, who demanded that officers should be explicitly required to 'encourage' natives to seek labour, and to do their utmost to assist those settlers who needed it. The Secretary of State in 1909 thought it necessary to issue instructions that officers were not to recruit labour for farmers; and in 1912 a commission was appointed to investigate the problems of labour supply. There was evidence that in some cases chiefs had forced natives to go and work; and there was clearly considerable diversity of practice observed by officials themselves in regard to assistance to recruitment.¹ The settlers on their part stigmatized the attitude of the officials as one of an unhelpful neutrality, and a section pressed the commission to recommend an increase in native taxes in order to augment the supply. Pressure from the settlers increased during the War; in 1917 the Governor agreed that natives should be induced 'by humane and properly regulated pressure within the reserves' to go out and work for Europeans.² The instruc-

¹ *Native Labour Commission Report, 1912-13, paras. 68, 83.*

² *Proceedings of the Legislative Council, 1917, p. 3.*

tions known by the name of the Northey circulars, issued in 1919, directed officers to exercise 'every possible lawful influence' to secure labour for settlers, and placed an obligation on chiefs and elders to render them the necessary assistance.

The feeling aroused in England by these orders was one of the causes leading to the issue of Lord Milner's dispatch of 1920, already referred to in this chapter.¹ It endorsed the policy of the Northey instructions in so far as to lay down that encouragement and advice should be given to chiefs and headmen, though no force or compulsion should be exercised. The pressure in home circles, however, was strong enough to cause the Colonial Office in the following year to vary the note of its instructions; the orders of 1921 approved of 'inculcating habits of industry both inside and outside the Reserves', but directed officers to limit themselves to giving information as to where labour might be required, and to take no further part in recruiting.² These instructions neither gave to the settler the help for which he asked, nor to the officials the clear guidance they were entitled to receive. The demand for labour continued to be acute, the farmers' associations continued to inveigh against the policy of 'neutrality' indicated by government, while local officers continued to apply to the instructions of the British Government that variety of interpretation which their vagueness almost seemed to encourage. In 1925, indeed, the Governor placed on them a construction which can with difficulty be held to have come within their intention, for he emphasized the need for giving all possible encouragement to natives to work for settlers.

The 1926 Conference of Governors of East Africa³ expressed the opinion that where productive labour in the reserves was not possible, the native should be definitely encouraged to go out and labour. 'Where both alternatives are open to him, the Government is not concerned to impose either upon him, but simply to ensure, so far as it can, that he shall work in the cultivation of his own land, if he pleases, or else as a wage-earner on alienated land if he prefers it.' At a later date the Commission on Closer Union in East and Central Africa⁴ pointed out that government

¹ See above, p. 616.

² *Dispatch Relating to Native Labour*, Cmd. 1509, 1921.

³ See above, p. 630.

⁴ *Report*, Cmd. 3234, 1929, pp. 63-72.

had a double obligation; it had to keep a fair field open for would-be employers and at the same time to protect the native from exploitation. The Commission did not doubt the benefit which the existence of non-native enterprises offered to the native, and it considered that the employment of the native in them might justifiably be encouraged so long as it was voluntary and did not operate in such a manner as to prevent the proper development of native society. It is important to note here that the Commission suggested that in order to safeguard the last condition a general survey of labour conditions should be made, and commended the lines of that undertaken by the Congo Government.¹

Some prominence has been given to these incidents, for they illustrate the difficulties attending the position of government in a period of transition towards a system of purely voluntary labour in private employment. The difficulties of the settlers were real; colonization had been encouraged by government, and the development of farms of the type allotted was impossible without hired labour. Only the most extreme section of settlers envisaged anything like compulsory recruitment; the issue was really one of the use of some degree of official pressure. Local officials were far from lacking in sympathy with the native position, but there were those of them who were in favour of the use of some form of pressure, in the genuine belief that no advancement was possible unless the native accustomed himself to regular labour. A problem similar in character, if not in degree, presented itself in Tanganyika owing to the rapid development of sisal and other plantations after the War, but here the attitude of government was at the outset more definitely on the side of neutrality. In 1926, however, following the proceedings of the Conference of Governors in East Africa, the Tanganyika Government issued a circular of August 5, 1926, which indicated the need for encouraging the native to work on farms in areas where his own production was insufficient.

In Nigeria a supply of labour at the government coal mines at Enugu was at one time obtained through the chiefs, but the difficulty was only of a temporary nature. The shortage of labour for the mines on the Gold Coast began to take an acute form about

¹ See below, p. 645. [The projected survey has not been made.]

1910, and the companies asked for any support which government could give, short of compulsion, in order to secure labour. Some local recruitment was at one time made through the Transport Department, and political officers in the Northern Territories gave some assistance in securing recruits from their area, but the high mortality among natives so imported led to the issue of an order by the Secretary of State in 1924 forbidding the grant of further assistance.¹ The problem, however, never assumed the same proportions or attained the same publicity as in East Africa.

(d) *The French Colonies*

In dealing with the French colonies a distinction must be drawn between French West and French Equatorial Africa. In the former, the absence of a large colonizing or mining interest made the question of labour supply one of local rather than general importance. Up to about 1928 the administration undoubtedly provided labour for some of the trading and agricultural enterprises, such as the *Compagnie des Mines de la Faléme* and the *Compagnie des Cultures tropicales*, while the *Compagnie de Culture cotonnière* at Diré in the Sudan received considerable assistance from local chiefs, who controlled a population only recently rescued from serfdom.² It has been officially admitted that assistance was given to forestry undertakings on the Ivory Coast in order to secure labour.³ In 1920 the local chambers of commerce made an unsuccessful attempt to secure the enrolment of a conscript 'labour army', but though the government now avails itself of the *deuxième portion* of its military conscripts for its own works,⁴ the use of labour from this source has been refused to private enterprise. In the Upper Volta the administration denied any assistance to employers, owing to the demands previously made for forced labour for the railways,⁵ but elsewhere it showed itself, on the whole, prepared to exercise influence on their behalf.

In French Equatorial Africa the method of exploitation known by the name of *cueillette*, which aimed at securing rubber, ivory, or

¹ *House of Commons Debates*, June 23, 1924, vol. clxxv, c. 8.

² F. Béline, *La Production du coton en A.O.F.*, 1925.

³ *Lieutenant-Governor's Circular*, no. 259 of Jan. 18, 1925.

⁴ See above, p. 627.

⁵ *Ibid.*, p. 614.

the like by native collection, gave the concessionnaire authority to exercise 'tous les droits de jouissance et d'exploitation',¹ and established conditions such that in the rubber producing areas at least the native may justly be said to have been subjected to general servitude. The legislation of 1895² effected changes which practically brought that system to an end; but even at a later date, the government formally recognized its obligations to assist private employers. A circular of October 10, 1911, emphasized the duty 'to provide for our fellow countrymen, who have come to take part in the work of colonization, a first guarantee for the continuation of that work by aiding them to obtain the necessary hands for the maintenance of their undertakings'.

The impetus given to the development of the French colonies after the War increased the demand for native labour, and, as a result, it was considered necessary to adopt safeguards on its behalf. A series of circulars relating to the protection of the health of native workers was issued in 1924, applicable to all French colonies,³ and local instructions issued in March, 1926, laid down that the first call upon the native labour supply must be for the provision of subsistence and marketable crops; military conscription has the second call, and only after these needs have been supplied can other demands be met. When in 1930 the Chamber of Deputies adopted a Bill providing for large colonial loans, a special point was made of the necessity of preparing a plan for the 'demographic protection' of the communities from which labour, whether voluntary or compulsory, is drawn, and it was considered that where health conditions were poor no recruiting of labour should be authorized.

(e) *The Belgian Congo*

- * The régime of the Congo Free State, like that of French Equatorial Africa, produced conditions in which recruitment for private employ hardly arose as an issue; the native was already in a position of servitude to the concessionnaire. The prevention of the abuses which this situation permitted was one of the first matters to engage the attention of the Belgian Government after annexation,

¹ P. Daresté, *op. cit.*, vol. ii, pp. 321 ff.

² See Chap. XII, p. 783.

³ *Ministerial Circulars*, July, 1924, and Oct. 4, 1924.

and Article 2 of the *Charte Coloniale* laid down that no one could be compelled to work on account of individuals or companies. Labour shortage began to present an acute problem with the development of the copper and gold mines, and early attempts to secure labour from Northern Rhodesia for the Katanga Mines only filled part of the gap. The government maintained an *Office du Travail* at Léopoldville for its administrative labour; local recruitment for private enterprise was from 1910 onwards placed in the hands of agencies in the Katanga and the Kasai under the name of *Bourses du Travail*; and in 1925 the *Union Minière* obtained sanction to extend its recruiting to Ruanda-Urundi. The provisions of the *Charte Coloniale* were not deemed to be inconsistent with the use of official pressure in aid of these recruiting organizations. A circular of 1922 emphasized the duty of officials to give all necessary aid to private enterprise; if moral authority, encouragement, and favours failed, marks of displeasure were to be imposed.¹

Local officers gave an effective compliance to these instructions. While the general object of official assistance may have been to promote the economic development of the country, the fact that the state had so large an interest in most of the industrial enterprises gave the recruiters' indents some of the character of a state demand. The requirements were large; the transfer of recruits over the considerable distances involved was accompanied by a high incidence of disease and mortality; and there were many signs that the system was attended with the most unfortunate results on the family and social life of the native.² The home government had to face criticisms similar to those which followed the issue of the Northey circulars in Kenya,³ though the demands made in Kenya, being only for local farm labour, caused little mischief to native life compared with the demands for industrial labour in the Congo. The government appointed in 1924 a Labour Commission to deal with the problems involved, and in the report issued in 1925 this body made a noteworthy departure in the treatment of the African labour problem by initiating a

¹ *Recueil mensuel*, 1922, p. 7.

² See statement by O. Louwers in *Revue catholique des idées et des faits*, nos. 40-1, Jan. 6, 1934.

³ See above, pp. 640-1.

survey of the limits within which recruiting could be regarded as permissible.¹ As a basic rule, it considered that a maximum of 5 per cent. of able-bodied male labour could be taken from any community for work at a distance; a further 5 per cent. could be taken for work within a two days' radius of the village; and a further 15 per cent. could be employed in the vicinity of their homes in the production of foodstuffs or short portorage or other activities on behalf of employers. The report seemed to imply that government would assist in the recruiting of labour up to these figures. Local orders of 1925 gave effect to the recommendations of the commission regarding the permissible percentage of labour to be taken, and certain districts were definitely closed to recruiters for a series of years. Protests, however, continued to be made in Belgium against the grant of official aid to recruiters, and late in 1925 the Colonial Minister, admitting that administrative officers had in some cases undertaken a role normally belonging to agents of private enterprises, required officials to abstain from direct assistance to recruitment.

At this point the Belgian Ministry began to find, as the British Colonial Office had already found, that it was not easy to steer a course between the pressure of humanitarian influences and the demands of employers who had become dependent on state assistance. As a result of the difficulties experienced in carrying out the recommendation of the 1925 report on the subject of the limitation of recruiting, a permanent Advisory Committee on labour questions was appointed in 1928. This body realized that the problem was not merely one of labour supply, but was related to the whole course of economic development. It delimited economic zones, in certain of which not only recruiting, but further concessions for industrial or agricultural purposes were to be prohibited, while in others a survey was to be made, with the help of employers and missionaries, in order to determine a local policy of development. It stressed the danger of official intervention in recruiting; 'cette situation provoque un malaise auquel on ne pourrait mettre fin qu'en déchargeant explicitement les agents de l'autorité de toute responsabilité dans la situation de main-d'œuvre des entreprises européennes.'

¹ *Rapport de la commission pour l'étude du problème de la main-d'œuvre au Congo belge, 1924-5.*

The examination of the labour situation continued to form a prominent feature in the annual reports of the Belgian Congo, and the situation was discussed in an important speech delivered in the Chamber on February 21, 1929, by the Colonial Minister, M. Jaspar. There was a movement on the part of the Catholic missions to protest against the excessive recruiting of native workers, and in 1930 another Labour Commission was appointed to study the question of recruiting on the spot, in collaboration with the 'Native Protection Commission', which exists in the Congo.¹ On its return the Labour Commission made two important recommendations. It pronounced definitely against official intervention on behalf of recruiters; only where backward tribes were concerned was the administration justified in intervening on behalf of satisfactory undertakings, and then only in pursuance of a definite ordinance by a governor of the province. As regards the percentages laid down by the Commission of 1925, the 1930 Commission thought that there was no advantage in maintaining the differentiation of labour into three classes, as no distinction could be drawn between employment at two days' distance and farther afield, but they still considered that not more than 10 per cent. of able-bodied males should be allowed to leave the village. It must be realized that the labour situation in the Congo changed somewhat rapidly from 1930 onwards owing to the economic depression; during 1931 no fewer than 72,000 workers were discharged, and, taking the Katanga as an example, it would seem that by 1933 the number of native wage-earners had fallen in relation to the year 1929 by 50 per cent. for the Katanga area and by 70 per cent. for the industrial region of Upper Katanga. Meanwhile, certain modifications in government policy took place; state officials were no longer allowed to enter the service of private companies, and district officers were prohibited from accompanying recruiters on their tours. The administration had, at an earlier stage, allowed the native authorities to assist recruiters,² but there were observers who pointed out that this system led, in practice, to recruiting becoming one of the principal functions of the chief. It was, indeed, stated that, owing to requisitions by chiefs, large

¹ See Chap. VI, p. 208.

² *Rapport du comité consultatif de la main-d'œuvre*, 1928, pp. 47-8.

numbers of natives had passed *en masse* into Uganda.¹ A decree of December 5, 1933, required the gifts and grants made to native chiefs for recruiting to be paid into the *caisses de chefferies*. The bonus paid for each recruit varies from 70 to 125 francs in the Upper Katanga and from 20 to 35 francs in other regions.

(f) *The Present Attitude of Administrations*

As will have been seen from this study of past conditions, policy has moved progressively away from reliance on methods of pressure, either direct or indirect, towards dependence on the normal economic stimulus. To this movement various factors have contributed. International influences have been represented in the general acceptance of the conclusion of the Temporary Slavery Commission of the League of 1925 that indirect or 'moral' pressure, if exercised by officials to secure labour for private employment, may in effect be tantamount to compulsion, and by the acceptance of the terms of the Geneva Convention of 1930 on Forced Labour. Certain administrations have been impressed by the effect on their own populations of a large emigration due to recruitment for work in other territories, a matter to which the report of the 1935 Committee on Emigrant Labour in Nyasaland has recently directed general attention. Perhaps the most effective factor has been the operation of economic incentives, which some observers now regard as not less important than the influence of the native tax upon the labour supply. They have noted that in certain areas 'the shopkeeper probably provides a far greater incentive than the taxgatherer',² and that taxation, which originally drove natives to work, 'has increased their relative preference for what they can get with money over leisure and the products of tribal communism'.³ Young men are bored by the limitations of village life and seek work to satisfy their desire for adventure and independence, also to earn sufficient wealth to pay dowry for wives or clothe themselves and their families.⁴ Even among more

¹ P. Orts, *Le Congo en 1928*. See also *Sixth Session of the Native Labour Protection Committee*, 1930-1.

² G. St. J. Orde Browne, *The African Labourer*, 1934, p. 32.

³ I. Schapera (Editor), *Western Civilization and the Natives of South Africa*, 1934, p. 202 (note).

⁴ F. Spearpoint, 'The African and the Rhodesian Copper Mines', *Supplement to the Journal of the Royal African Society*, vol. xxxvi, July, 1937.

prosperous agricultural communities the more adventurous youths will leave home and engage in work if fair treatment and wages are available.¹ The play of the various incentives must clearly vary in different areas, but it is true generally that the flow of labour is now far less dependent than formerly on the incidence of taxation. The situation has further been affected by the attempts made to substitute a stabilized industrial population for migratory labour in the Congo, and by the facilities for the accommodation of wives and families in the Rhodesian copperbelt and elsewhere.²

In questions where natives are concerned it is always important to examine the extent to which a policy announced by government is implemented in day-to-day practice. Those who have observed the British colonies in recent years will probably have seen little evidence of any kind of official pressure. Perhaps the best test is the regulations controlling the relations between the recruiter and the chiefs. The South African Native Labour Regulation Act of 1911 provides in section 13 that no concession by a chief or headman for the supply of labour shall be legally binding. In the High Commission areas no contract by which any chief binds himself or his people to render labour is valid, although it would nevertheless appear that in these areas the chiefs, in order to facilitate tax collections and the payment of their own levies, put pressure on their subjects to enter into recruiting contracts.³ In Southern and Northern Rhodesia contracts by native chiefs to provide labour are similarly illegal, and in Kenya and Tanganyika the offer of gifts to native chiefs or headmen with a view to securing labour is punishable with a fine. In some areas, such as Tanganyika, there have recently been complaints of a labour shortage, but a recent committee took the view that there is ample manpower for the needs of the territory; there is a labour wastage among wage-earners, but this could be remedied by making labour conditions more attractive, as well as by the more economical use of the existing supply.⁴ In the French territories also there

¹ Col. J. Ainsworth, quoted in *Report of the East Africa Commission*, 1925, Cmd. 2387, p. 167.

² See below, p. 675; and Chap. IX, pp. 512-15.

³ I. Schapera, op. cit., *Journal of the Royal African Society*, 1933.

⁴ *Report of the Committee appointed to consider and advise on questions relating to the supply and welfare of Native Labour in the Tanganyika Territory*, 1938, p. 11.

are now few signs of official pressure in the interests of private recruitment, but it remains to be seen what attitude will be adopted if the attention now being paid to the increase of mineral production leads to an urgent demand for mine labour.

In the Belgian Congo the fact that the state has a direct interest in the activity of most of the industrial enterprises continues to render it difficult for the local administrator to observe the neutrality indicated by official policy. While the definite exclusion of certain areas from recruitment remains operative, in regard to others intervention in aid of the recruiter, though far less marked than formerly, has seldom been entirely absent. The system under which a bonus for recruiting is paid to the *caisse de chefferie* remains in force. The policy of the home government itself seems to have undergone some change, as the result of the revival of industry after the depression period. The Colonial Minister in his instructions of October 15, 1934, indicated that 'l'administrateur . . . qui engagera de façon pressante l'indigène à travailler pour compte d'un employeur qui assure à son personnel des conditions de travail, un salaire, un ravitaillement, un logement convenables . . . accomplira un devoir de sa charge'.

In the Portuguese areas the payment to chiefs for assistance to recruiters authorized by the decree of November 29, 1922, has been withdrawn. The 1928 Native Labour Code, while providing that every authority exercising jurisdiction over natives should be bound to facilitate the operations of all persons wishing to recruit workers, limited the intervention of officials to pointing out suitable places for recruiting and to giving advice. It forbade officials to accompany recruiters or to supply them with police, and discouraged the making of gifts by recruiters to native chiefs to secure labour. The decree of July, 1930, and the Colonial Law of November 15, 1933, formally prohibit official intervention in aid of recruiting; the administration retains, however, the right to take steps for the 'educational' encouragement of labour. It is claimed by Portuguese authorities that the considerable sums received annually by the state in capitation fees should be regarded as compensation for the loss of revenue due to the exodus of labour from Moçambique, and that a certain portion should be spent on native welfare.

V. PRIVATE EMPLOYMENT: THE REGULATION
OF RECRUITMENT(a) *The Recruiting Organizations*

Though there has been marked progress in the withdrawal of pressure in securing labour for private employment and a large increase in the flow of non-contract labour, Africa has not yet arrived at the stage when employers are able to secure the whole of their labour without some system of recruitment. In this respect Africa is not unique; most of the labour employed on the plantations of Ceylon is recruited from the neighbouring provinces of Southern India, the tea plantations of Assam require an annual recruitment of some 50,000 men, and there is a regular system of recruiting contract labour in French Indo-China. In the early stages of development in Africa it was mainly the larger mining undertakings which felt this need, but in certain areas farm or plantation workers had also to be recruited; the farms in Southern Rhodesia and Kenya, the oil plantations in the Congo, and cotton companies in the French colonies, all used recruiting organizations: and the recruiting of native labourers from Angola for the cocoa plantations on the Portuguese islands of San Tomé and Príncipe formed one of the blackest spots in the history of recruiting in Africa. Enough has already been said regarding past methods of dealing with labour to make it unnecessary to deal at length with the abuses which marked the earlier history of recruitment. There is now no territory where recruitment for private employment is officially carried out through an agency of government; such agencies can doubtless ensure improved methods of recruiting, but it has been realized that a state agency for recruitment inevitably involves some element of pressure. It is also practically impossible for a state agency for recruitment to distinguish between good and bad employers.

Private organizations have been extensively used to obtain labour which could not be provided by the native population in the vicinity of the enterprise, and some of the larger industrial undertakings continue to make use of them. The largest of these organizations are the Witwatersrand Native Labour Association and the Native Recruiting Corporation, which are responsible

for the transport of the recruited labour to the Rand mines, the former operating in Portuguese territory. Of late years the Native Recruiting Corporation has instituted an 'assisted voluntary system', under which a native who is unwilling to contract for as long as the normal period of 313 shifts is supplied with his railway ticket and food, and is permitted on arrival to engage himself at the mine of his choice. The system represents some advantage both to the mines and to the labourer; the mine is spared the capitation fee payable to the recruiting agent, and the labourer receives an advance free of interest. During the twelve months ending June 1933, 80,099 natives utilized this channel as compared with 47,772 in the previous year. Besides these major organizations many smaller agencies are licensed to recruit in the Union; in 1935, 529 recruiting licences were issued to agents, not all of whom were employed by the large recruiting organizations. There are numerous organizations which are not associations of employers, but private profit-making concerns, and the Native Economic Commission recommended that an effort should be made to encourage recruitment through larger units on a co-operative rather than a profit-making basis. It pointed in particular to the fact that the individual recruiter was responsible for a number of abuses, such as the luring away of juveniles. Complaints regarding this practice have been made also in the proceedings of the Transkeian General Council.¹

Of the 341,207 natives employed on the Rand mines at the end of 1936, 89,104 came from Portuguese territories, 49,582 from Basutoland, 7,521 from Bechuanaland, 7,316 from Swaziland, and 3,833 from other territories. Recruitment north of latitude 22 degrees south was forbidden in 1914, mainly on grounds of health, but on the recommendation of the Low Grade Ore Commission of 1931, an experimental recruitment of 2,000 was made in 1931 from Bechuanaland and Northern and Southern Rhodesia. Permission to recruit a further 3,000 was, with the sanction of the governments concerned, granted in 1935, the area being extended to include Nyasaland. The importation of tropical labour has now been legalized under the Immigrants Regulations Amendment Act, 1937. Portuguese recruitment has been secured by a

¹ *Proceedings and Reports*, 1934: see Chap. IX, pp. 353 ff.

series of conventions between the two governments. The first of these was made in 1909, but the treaty was denounced by the Union Government in 1922; a new convention was not concluded till 1928, and this was revised in 1934; it provided for a maximum complement of 80,000 recruits, and this was raised in 1936 by 10,000, subject to an annual review. It is an important feature of this system that recruitment is limited to a period of twelve months, renewable at the option of the labourer up to a maximum of eighteen months, and that after the first nine months' service one-half of the wages earned shall be deferred and paid through a Portuguese curator on the return of the native to his home. The Portuguese Government receives an annual capitation fee for natives recruited of not less than £2 4s. 6d., multiplied by the average number employed.

In South-West Africa, up to 1925, nearly all recruiting for mining or industrial purposes was undertaken by the government. Two native recruiting associations have since been formed, the Northern and Southern Labour Organizations, which work outside the Police zone. Within the Police zone there is no recruiting system, the natives finding employment themselves or with the assistance of a native welfare officer, but this officer does not recruit nor are traders allowed to do so. In 1936 the Northern Organization recruited 2,686 men and the Southern 2,265.

Labour for Southern Rhodesia was once secured through the Rhodesian Native Labour Bureau, established in 1906 with the aid of a Labour Fees Ordinance, which made subscriptions by mine-owners compulsory; it was placed on a voluntary basis both for mine-owners and farmers in 1911, and was subsequently assisted by a considerable subsidy from government. It, however, supplied only about 10 per cent. of the labour coming to the mines, and owing to difficulties between the mining and farming interests it had a chequered career and ceased operations during the depression period. The territory is largely dependent on outside labour; at the time of the 1936 census, of the number of natives in employment 42.5 per cent. were of Southern Rhodesian origin; 28 per cent. were from Nyasaland; 18.5 per cent. from Northern Rhodesia, and 10 per cent. from Portuguese territory. In 1914 Southern Rhodesia concluded an agreement with the Government

of Moçambique, renewed in 1934, providing for a maximum monthly number of 15,000 recruits. These numbers have never been recruited in practice, the number in 1935 being 7,100, but a considerable amount of voluntary labour crosses the border. A second agreement concerning native labour in Southern Rhodesia is that of August 21, 1936, made with Northern Rhodesia and Nyasaland; it deals with conditions of travel of migrant labourers and the improvement of conditions of labour; but its working is imperilled by the growing tendency for labourers to take advantage of the facilities for going to Southern Rhodesia and then to slip over the border into the Union, often taking the Messina mines as the first stage. It provides for a Standing Committee to secure co-ordination in labour policy, and for representatives of Northern Rhodesia and Nyasaland resident in Southern Rhodesia as Labour Commissioners.

In Northern Rhodesia, 53,462 natives were employed in 1936, within the territory, of whom a monthly average of 16,776 were in the mining industry, and 51,212 natives were estimated to be employed outside the territory.¹ Until recently two organizations were at work; the Rhodesian Native Labour Bureau recruited in Northern Rhodesia for employers in Southern Rhodesia, while in 1930 the copperbelt mining companies formed the Native Labour Association to provide for their own needs. Labour, however, now comes forward spontaneously, and the first of these organizations has gone into liquidation, while the second suspended recruiting operations in 1932. It is noteworthy that the copper mines do not now rely on long-term contracts, being able to engage labour on monthly agreements under which they are not obliged to pay the expenses of repatriation.

In Kenya and Tanganyika, private recruiters are licensed, but the majority of labour is obtained without the use of recruitment. The labourer receives a *kipande* or monthly work card, implying an oral contract for a month's work. The Tanganyika Committee of 1938 advises the continuance of the recruiting system in the interests both of the employers and the natives, and in order to abolish the present unsatisfactory conditions under which would-be workers travel long distances on foot without adequate

¹ See above, p. 606.

provision for their feeding or shelter.¹ In the British West African colonies recruitment has been little in evidence, and it is significant that the great majority of undertakings now obtain labour without the use of contracts. In the French territories no large recruiting agency now exists; in the Belgian Congo, of the recruiting agencies mentioned above,² only the *Union Minière* organization has operated in recent years. Agencies of this nature offer many advantages both to the labourers and employers, but are expensive in operation, the cost having at one time been £6 per man in South Africa, and £7 in Southern Rhodesia, and it is clearly to the advantage of the employer to encourage a flow of non-contract labour. Moreover, though such organizations work well for the larger concerns, they tend to break down in the case of limited needs.

Labour has of recent years tended to come forward spontaneously in increasing numbers, and the determining factor is now largely one of distance. Where the supply of local labour is insufficient the use of a recruiting organization is still needed, but in the case of the better undertakings, which can attract their own labour, this tends progressively to take the form of a forwarding agency, which assists the native to overcome the difficulties presented by the journey. Under the influence of changed economic conditions, and of the more systematic control now carried out by governments, a great improvement has taken place in methods used in recruitment. The business of the private recruiter is one which now requires appreciable capital and careful management, and reputation has become an important asset with employer and recruiter alike. Complaints certainly still exist, but they no longer refer to wholesale abuse, and centre for the most part on such matters as the methods used for recruiting youths and immature adults. It has further been observed that in South Africa the position enjoyed by the European trader in the reserves enables him to put pressure on natives to discharge their indebtedness to him by entering into labour contracts, for which he at the same time receives a capitation fee.³

¹ *Report*, op. cit., pp. 23, 38; *Annual Report*, 1937, p. 90.

² See above, p. 645.

³ *Report of the Native Economic Commission*, 1930-2, U.G. 22, 1932, para. 956.

(b) Rules regarding Recruitment

Although the Geneva Convention on the Recruiting of Indigenous Workers, which was adopted by the International Labour Conference in 1936, has not yet been ratified by any African power, it received general support in the Conference and ratification is being prepared in France and Great Britain. Before allowing recruiting, it would require the competent authority to take into consideration the possible effects of the withdrawal of adult males on the social life of the populations concerned, and to take measures to avoid the risk of pressure being brought to bear on behalf of the employers. It would forbid the recruiting of non-adult persons except for employment on light work under special conditions and with the consent of their parents. Wherever possible it would require the authorities to encourage recruited workers to be accompanied by their families. Chiefs and native authorities are to be forbidden to act as recruiting agents or to receive presents for assistance in recruiting; rules are proposed regarding medical examination and transport to the place of work.

At present all territories have their own rules.¹ The law in the Union² requires the deposit of a substantial guarantee by labour agents and brings their operations under the control of the Director of Native Labour. It prohibits resort to native headmen. The Act of 1921 limited the amount of advances given in connexion with labour service. The British colonies now require the recruiter to take out a licence and to furnish a substantial bond for observance of regulations. To take typical instances, the Northern Rhodesia Ordinance 56 of 1929 requires the agent to furnish a bond for £100, to specify the employers to be served, and to license all messengers, who must carry a badge. Uganda has a similar law, with a penalty of £100 and a year's imprisonment for infringement of recruiting regulations. In the Belgian Congo, the General Administration Ordinance of June 18, 1930, is the basis of the local ordinances regulating the conditions of recruiting. The Katanga Ordinances of August 30, 1932, and June 2, 1933, exact a high standard from the recruiter. A guarantee up to 40,000 francs

¹ See International Labour Conference *Report on the Recruiting of Labour*, 1935.

² Act 15 of 1911.

may be required; he must maintain adequate arrangements for food, housing, and medical attendance; must provide a special conductor for any party of more than twenty-five natives when travelling, and is under numerous detailed obligations in regard to the welfare of his recruits. The Belgian authorities are strict in the administration of this law. In French West Africa, the *arrêté* of March 29, 1926, established bureaux for employment, information, and statistics; these serve as intermediaries between employer and native, and supervise contracts. The Portuguese law requires a recruiter to furnish a bond, obtain a licence from the Governor, revocable at any time, and furnish evidence of good character.

In addition to the regulations applying to the recruiting agent, most countries lay down requirements to be observed in connexion with the transport of contract labourers, an important provision in view of the long distances which frequently have to be covered. Expenses for the journey from the place of engagement to the employment centre, and also for subsequent repatriation, are the responsibility of the employer; the sole exception to this rule being the Union of South Africa, and the High Commission Territories, where the native has to repay the cost of his journey. The refund on this account constitutes a considerable reduction of the wage earned; the travelling expenses of mine labour from the Transkei represents an average of 15 to 20 per cent. of their total cash earnings and in the case of workers for the sugar estates from 27 to 37·5 per cent.

This matter attracted attention in the discussion of the International Labour Conference at Geneva in 1935. The Committee of Experts expressed itself in favour of the principle that all expenditure on the journey and repatriation should be borne by the recruiter or employer; the South African employers are, however, understood to be opposed to this, on the ground that it would adversely affect the supply of non-contract labour. The Geneva report¹ of 1937 on the regulation of contracts of employment of indigenous workers recommends provisions for the repatriation by the employer of workers brought to the place of work and also for that of their families if they are authorized to be with them.

¹ International Labour Conference, 24th Session, Report 11, *Regulations of Contracts of Employment of Indigenous Workers*, Geneva, 1937, pp. 153 ff., 221-2.

The Geneva Convention on the recruiting of labour, already referred to,¹ has similar provisions regarding recruited labour. Conditions on the journey are now also generally covered by law; there is a tendency to substitute mechanical transport for marching. Thus the Belgian law requires the use of rail or steamer whenever possible, and prescribes the erection of camps at intervals of 30 km. if men are travelling on foot. Most countries regulate 'foreign contracts' with considerable severity. Thus the majority of British colonies require the Governor's approval on any foreign contract, and in addition a special bond is in some cases required; the unauthorized collection of men for employment outside the colony is heavily penalized. For instance, Kenya prescribes a fine of £100 or one year's imprisonment for this offence.² Nigeria restricts such contracts to countries approved by the Secretary of State.³ Since large numbers of natives travel to and from work without contracting themselves through a recruiter, certain governments also assist them by maintaining rest camps along the main routes; these provide rough accommodation, and a small dispensary to meet the needs of the sick or injured, but adequate provision remains to be made in most if not all territories.

(c) *The Future of the Recruiting System*

Statistics are not available to show what proportion of the total labour employed now comes in by recruitment. Even allowing for the abnormal conditions of the depression period, it is clear this has been a diminishing figure; it will depend in the future on the recurrence of any exceptional demand arising from the increase of mining or similar activity. The merits of the recruiting system formed the subject of a special study by the International Committee of Experts on Native Labour, whose report was considered at the nineteenth session of the International Labour Conference in 1935. They pointed out that the industrial history of countries of western civilization showed a tendency towards the adoption of the system of free public employment exchanges as a means of bringing employers needing labour and workers needing employment into touch with each other. In view, however, of the

¹ See above, pp. 628-9.

² *Laws*, cap. 139.

³ Ordinance 1 of 1929.

difference of the conditions in Africa, they did not think it advisable to suggest the universal replacement of recruiting by free public placing systems; they confined themselves to the hope that the recruiting of labour will be progressively rendered less necessary by such measures as the improvement of conditions of labour, the development of means of communication, and the creation of institutions under public supervision, as, for example, public employment exchanges, workers' co-operative, provident, or other associations, or organizations of employers. This aspiration is entitled to respect; and there are two factors of increasing importance which should not be forgotten: the desire of the native to choose his own employer, and his growing feeling that he dislikes being drafted about like cattle, as it was put in one area. It seems clear, however, that, though there is an increasing supply of unrecruited labour, some of the major industries are still likely to need the recruiting agency, and where labour comes from a distance, the agency can help the native in securing organized conditions of travel, and a guarantee of repatriation. There are some territories where, in the absence of an efficient recruiting system,¹ or of any recruiting or forwarding agency, natives now suffer great hardship in travelling long distances on foot in search of work, begging or working for their food from village to village;² again, where the labour reservoir is some distance from the area of employment, it is desirable to have some agency in the labourers' home districts which would enable recruits to be medically examined and enter into contracts, if only to avoid long and useless journeys by persons unsuited to employment. The provision of rest camps and the improvement of communications, both desirable, do not by themselves provide a complete remedy for the situation.

VI. PENAL SANCTIONS

In the majority of British territories penal sanctions are attached to labour offences; legislation of this type is, as will be seen, less conspicuous in British West Africa, and in the French and Belgian colonies. Penal sanctions apply to offences both by employers

¹ See *Tanganyika Committee*, 1938, op. cit., p. 23.

² See *Report of Nyasaland Committee on Emigrant Labour*, 1935, pp. 25-8.

and employees, but for the present purpose the latter claim first attention. The offences penalized fall into two classes: first, breaches of labour agreements or action injuring the interests of employers; and secondly, infringements of safety regulations, or such action as constitutes a danger to public welfare. The study of legislation of this nature is complicated by the fact that in British areas the law is often of the 'omnibus' type, providing for both classes of infringement, and it accordingly embraces matters which elsewhere would be left to Factory Acts or to the operation of the ordinary civil and criminal law. There is, in consequence, a wide variation of penalty. Thus, any contravention of the Native Labour Regulations is, in the case of native labourers in the Union, punishable with a fine up to £10 or imprisonment up to two months for major offences such as breaches of Factory Acts or safety regulations, and by fines of £2 for minor offences, which are for the most part breaches of agreement and the like. In British West Africa the procedure has become one of civil jurisdiction only, and may be illustrated by the Gold Coast Ordinance of 1934. The court may adjust and set off claims between employer and employee, order the payment of damages, direct the fulfilment of the contract, or cancel it. Parties neglecting to carry out the orders of the court may be committed to prison for not more than three months. In other British territories penal sanctions exist; it is also usual to divide offences into major and minor. The 'minor' offence is punishable with fines amounting to a half-month's wages, as in Northern Rhodesia and Tanganyika, or one month's wages, as in Uganda, or of 3s., as in Nyasaland, with an alternative of one month's imprisonment; the 'major' offence is punishable with penalties which vary from a fine of £7 10s. and two months' imprisonment, to one of £10 and six months' imprisonment. The definition of the major offence is often such as to leave a considerable latitude of interpretation; it seems to include, for instance, neglect of animals in Northern Rhodesia, or the failure of a cattle herdsman to report the death of stock in Kenya and Tanganyika, both being offences to which importance is attached locally. In Northern Rhodesia the Mining Regulations of 1934 allow mine managers to impose fines up to £2 for breaches of

the regulations. In Tanganyika specific provision is made in the labour legislation for corporal punishment of juvenile offenders, but such provision is a feature of the general criminal law in other territories. In the Union the law goes farther; the Native Service Contract Act of 1932 permits the corporal punishment of male servants up to 18 years of age for any contravention of the Masters and Servants Acts.

In the French colonies legislation is more careful to discriminate between different classes of offences. Absence for a 'legitimate' cause only entails loss of wages; 'illegitimate' absence—that is, due only to the employee's inclination—is a breach of contract and amenable to penal law. Penal sanctions are applicable also to such offences as the completion of a fictitious contract, accepting other employment when under contract, or the like. There is no doubt that the effect of the punishment of *vagabondage* is in many cases the same as that of penal sanctions for breach of contract. Further, indirect sanctions are implied by the provisions which impose penalties on workers guilty of the so-called *délit d'emport d'avances*, that is, on workers who neither execute their contract nor repay the advances made to them at the time of their engagement.

In the Belgian Congo a decree of March 16, 1922, provides both civil and penal sanctions for breaches of obligations arising out of contracts of employment. Civil sanctions aim at prohibiting acts detrimental to private interests. They include the cancellation of the contract, damages for the employer, and coercive detention on failure to make restitution or pay costs ordered by the court. Employers may impose fines for offences against discipline, or against the rules of the establishment; the total of such fines may not exceed the wages due for the day on which the offence took place. In exceptional cases the employer may make deductions from wages on account of the loss or destruction of articles belonging to him, but decisions of the employer are subject to revision in the courts. Penal sanctions are to repress acts considered contrary to the public interest, such as fraudulently obtaining an advance (for which the penalty is three months' imprisonment), destroying a work book (50 francs or one week), or grave or repeated infringements of labour rules (50 francs or fifteen days'

imprisonment). Corporal punishment cannot be inflicted for labour offences.

The statistics published by the various governments do not provide information sufficient to judge of the manner in which the penal sanctions are used in practice. In the Union some 15,569 offences by native and coloured persons under the Masters and Servants Acts, and 16,861 under the Native Labour Regulation Act, came before the courts in 1936, but certain of the latter offences were breaches of pass and not labour regulations. Few of the published reports give any analysis showing the penalties imposed on employers and employees respectively. In the British areas the Tanganyika report of 1936 shows that there were 278 convictions of workers and 185 convictions of employers; in Kenya in 1935, under the Employment of Natives Ordinance, there were 151 convictions of Europeans, 99 convictions of Asiatics, and 833 convictions of natives. Under the Resident Native Labourers Ordinance the convictions were 74 for Europeans, 4 for Asiatics, and 945 for natives. In Nyasaland penalties do not appear to be frequently imposed: in 1935, only 67 persons paid fines and 33 were imprisoned. In Uganda in the same year 110 persons were convicted under the Masters and Servants Acts. There appear to be no published figures for Northern Rhodesia. In the French colonies disputes regarding labour contracts have been transferred from the ordinary courts to *conseils d'arbitrage*, specially constituted for this purpose; as a rule the local administrative officer is the president, with assessors consisting of equal numbers of colonists and natives.

The use of penal sanctions was, until fifty years ago, a conspicuous feature of labour legislation in Great Britain; it is still found in some parts of Europe and in Asia. In India the Act which penalized breaches of contract by workmen was not repealed until 1926. The necessity for maintaining provisions of this character in Africa lies in the absence of the factors which in modern economic conditions normally regulate the relations of employer and employee. The remedy of dismissal, although of increasing importance, is still ineffective in regard to a large proportion of African labour; the worker and his family are usually self-supporting units of village life, and wage-earning is often only supple-

mentary to labour for purposes of subsistence. It has again been found difficult to secure regularity of attendance or of systematic work among a population which is facing for the first time the conditions of organized labour in agriculture or industry; some past experiences show that there have been estates where a twenty hours' week has scarcely been attained, and an instance is known in which a small diamond mine had to stop when it rained because the employees went fishing.

In discussing the merits of the legislation in force in South Africa the Economic and Wage Commission of 1925¹ not only found its justification in the character of African labour, but emphasized the fact that it operated also to protect the employee; 'the clauses penalizing the master, which could not exist without those penalizing the servant, are very necessary for a labourer who has no possible chance of asserting his rights through civil procedure'. In this respect the Acts certainly have their value, but it is clear at the same time that they are on the whole designed to serve the interests of the employer rather than the employee, and lend themselves to abuse by a certain type of employer. Experience has shown that this is conspicuously the case in certain farming areas of South Africa, where many observers have held that the use of the penal sanction assists to maintain the labourer in circumstances approaching those of serfdom.² The Native Service Contract Act of 1932 has one very unusual provision: the contract entered into by a native is binding on his children up to the age of 18 years without their consent, and the penal sanction accordingly becomes applicable to the whole family. It may also be remarked that the native employee is less likely to have recourse to the courts than his master, and it is pointed out by Mr. Lucas in the addendum to the Native Economic Commission Report that the Acts make it impossible for natives to organize to protect themselves against exploitation.³ The Committee of Experts on Native Labour,⁴ when dealing with the question of the contractual employment of indigenous workers, recommends the gradual abolition of criminal penalties in the more usual cases of breach of contract,

¹ *Report*, p. 40.

² *Report of the Native Economic Commission, 1930-2*, U.G. 22, 1932, p. 216.

³ *Op. cit.*, p. 217, para. 281.

⁴ See above, p. 658.

and considers that in the case of refusal to commence or perform service, desertion, or neglect of duty, action should be by civil process only. The ideal is one towards which every administration should attempt to work, but the complete disappearance of criminal penalties must await the evolution of social and economic conditions which will replace the sanctions which penalties supply. In the meanwhile there is, at all events in South Africa, an obvious case for reconsideration of some of the provisions of the law and for the fuller application of administrative safeguards in order to mitigate its operation in practice.

VII. REGULATIONS IN THE NATURE OF PASS LAWS

(a) *Description*

It will be convenient to give here some account of the regulations generally described under the name of Pass Laws, though they are confined to certain territories and apply to a wider range of purpose than control over the movement of labour. Thus in the Union of South Africa, in which they appear in the most conspicuous form, they were originally of the nature of police regulations; they were subsequently utilized to assist in securing a supply of labour and to prevent desertion, and in their final stage, while still used to safeguard the labour agreement, they have become part of the machinery of the segregation policy, in so far that they are used to restrict the influx of a native population into urban areas. It will accordingly be necessary to examine not merely the pass laws properly so called, but the range of legislation which operates through the use of the pass or permit.

The South African Pass Law dates from the Earl of Caledon's Proclamation of 1809, which was designed to give a fixed domicile to the Hottentot nomad; persons who had no pass were treated as vagrants, liable to be contracted by the local authorities to any one they pleased, and on the farmer's own terms. The regulation thus bore some resemblance to the early English Vagrancy Acts, or the Statute of Labourers of 1351, which applied a similar system to check the movement of emancipated serfs or those who sought in other parishes the higher scale of wages which resulted from the labour scarcity caused by the Black Death. A further use was found for the pass regulation in order to prevent the influx of Xhosa into

the border districts and to control cattle theft. In the Cape Province the pass operated to secure the confinement of tribes to the Transkeian Territories and British Bechuanaland, and to restrict the movements of Africans out of these areas. The control of the movements of natives living within the Cape Province itself was effected through the operation of the Vagrancy Acts and cattle removal regulations; as a result the use of the law relating to the carrying of passes is now less in evidence in the Cape than elsewhere, and applies to 'foreign' natives only.

The earlier use of the pass system in the Transvaal and Orange Free State had a wider scope; it was directed not only to the control of the vagrant (*land-looper*), but to the stabilization of farm labour; a native could not travel unless he was in employ or was authorized to look for fresh work, and in the Transvaal the law added the penalty of flogging to that of imprisonment. The operation of these restrictions became more severe as natives tended to move off to the diamond-fields. The development of the gold-fields in turn saw a new use for the pass regulation. While the diamond mine protected itself against desertion and theft by the use of the 'closed' compound, the frequent desertions by contract labour on the gold-fields were met by regulations creating 'labour districts' within which any native found without a pass was liable to arrest. It remains to notice the final development of this type of legislation. The Natives (Urban Areas) Act 21 of 1923 made use of the pass system in order to control the entry of natives into the towns, and legislation subsidiary to that Act, such as the 'curfew' regulations or provisions made under the Native Taxation and Development Act 41 of 1925, assisted to regulate their movements within the urban area. The system has been further developed by the Native Laws Amendment Act of 1937, which permits the removal from urban areas of labour in excess of employers' requirements.¹ The pass system has also been employed as part of the machinery of the land policy; the Native Service Contract Act 24 of 1932 utilizes the pass, in the manner shortly to be described, in order to ensure that natives residing as labour tenants on private farms shall not evade their obligations towards their landlords.

¹ See Chap. IX, pp. 501-2.

The use of pass regulations in the Union presents, therefore, a complicated picture, and it may be convenient to give a detailed statement of the position in the different provinces. In the Cape Province, Act 22 of 1867 is still in force, under which passes are required by 'foreign' natives on entering the colony. In effect, this means that passes are now required only by natives moving into the Cape from South-West Africa or the Protectorates, or in and out of British Bechuanaland, and in and out of the Transkeian Territories; no pass is required to travel inter-territorially within the Transkei.¹ Elsewhere in the Cape no pass is required, but the provisions of the Vagrancy Act 23 of 1879, as amended by Act 27 of 1881, are still available to check 'vagabondage'. As regards other legislation making use of the pass system, the Natives (Urban Areas) Act of 1923, amended by Act 25 of 1930, provides that a native entering a proclaimed urban area must obtain a permit to seek work, and when work is obtained his employer must register the contract of service. The permit to seek work is usually limited to a few days' duration, and unless it is renewed the native is liable to arrest. Act 25 of 1930 provides for control of natives in specified urban areas between certain hours by means of the curfew rule; no native (except the exempted classes) may be in any public place between the specified hours without a permit. Most of the large towns, except Capetown and Port Elizabeth, have applied this law. Regulations made under section 23 (3) of Act 21, 1923, further allow the local authorities to issue permits to different classes of natives as evidence of their right to live in urban locations; without such a permit the native is subject to arrest or expulsion.

In the Transvaal and Orange Free State the pass system proper is stricter and more widely used. The Native Administration Act 38 of 1927 provides that regulations in the nature of pass rules may be made by the government, and in the exercise of this authority the government issued Proclamation 150 of 1934, which requires a native to take out a pass to enter or travel within any pass area—that is, anywhere within the two provinces excepting

¹ British Bechuanaland Proclamation 2, 1885; Proclamations 110, 1879 (Transkei); 112, 1879 (Griqualand East); 140, 1885 (Tembuland); 340, 1894, and 497, 1895 (Pondoland); 109, 1894 (Transkeian Territories).

native areas scheduled under the Natives Land Act of 1913. The system is to some extent mitigated by the issue of travelling passes by officials and owners of farms, and by the grant of general and special exemptions. As regards other laws utilizing the pass system, the Native Labour Regulation Act 15 of 1911 applies in the mining areas; under this a native employed in a 'proclaimed labour district' is required to obtain a permit from his employer if he wishes temporarily to absent himself from the property on which he is employed. The urban conditions are, as in the Cape, regulated under the Natives (Urban Areas) Act of 1923, to which reference has been made. In addition, the Native Service Contract Act of 1932 applies in both provinces. This Act requires a native resident on a private farm—that is, in effect, all labour tenants—to obtain a document of identification before proceeding to any other place than his home; no one may employ a native unless his document of identification bears an endorsement by the owner of the farm on which he is resident authorizing him to seek fresh employment. Further, the Natives Taxation and Development Act of 1925 provides that any receiver of native tax, any European member of the police or a chief or headman, may demand production of a tax receipt; in default of producing such receipt a native is liable to arrest. As some mitigation of the effect of this measure the tax receipt and the document of identification above referred to have been merged in one document. In Natal the Pass Law proper, Act 48 of 1884, provides only for inward and outward passes, which are in the nature of passports; natives resident within the province may travel without passes. But the Natives (Urban Areas) Act of 1923, the curfew rules under Act 25 of 1930, the Native Service Contract Act of 1932, and the rules under the Natives Taxation and Development Act of 1925, are in force.

Viewed as regulations for the control of industrial labour, the laws making use of the pass system are, as will have been seen, in fullest operation in the Transvaal and in the Orange Free State; as measures for control of farm labour they operate fully in the Transvaal, Orange Free State, and Natal; the restriction on movement to and within the urban areas operates in the 'proclaimed' towns in all four provinces. The oppressive and, indeed, obnoxious nature of some of these regulations, and their liability to misuse

both by employers and police, led to the appointment of committees of inquiry in 1914 and again in 1919.¹ It hardly required the evidence which these investigations elicited to demonstrate that the powers conferred by the regulations were widely abused, or that the ease with which they were evaded by criminals made them ineffective for some of the purposes for which they were designed. There was, on the other hand, a general agreement that some system of identification was required, not merely for occupational but police purposes; in the words used by Lord Milner in 1902: 'Alike for the protection of the natives and for the protection of the whites it is absolutely essential to have some reasonable arrangement by which the incoming native can be identified and his movements traced.'² A measure, entitled the Native Registration and Protection Bill, was put forward in 1923 with a view to simplifying the procedure, but was not proceeded with, though some simplification of the urban regulations was effected when the Natives (Urban Areas) Act of 1923 was passed.

The Native Economic Commission of 1930-2³ pointed out that the pass regulations, apart from their generally oppressive nature, had the effect of creating a large volume of technically criminal offences which carried no moral opprobrium. The extent to which this remark is justified is revealed in the figures already quoted.⁴ The Commission pointed further to the significant fact that out of 42,000 convictions against the pass laws in 1930 no fewer than 39,000 were from the Transvaal alone. That some measure providing for identification is necessary may be admitted, but the system as a whole still awaits the reform which it obviously requires. Apart from the effect which the use of regulations of this type must have on the attitude of the native towards the law of the country, the opportunities afforded for abuse by subordinate officials are such as to bring the administration under justifiable criticism.

In South-West Africa natives require a pass to go from one reserve to another or to enter an urban area, where they must be registered on obtaining employment. The Native Affairs Department can close urban areas against fresh natives coming in to seek

¹ *Report of the Interdepartmental Committee on Native Pass Laws*, U.G. 41, 1922.

² *Ibid.*, p. 3.

³ *Report*, paras. 720-47.

⁴ See above, p. 662, and Chap. VII, p. 282.

work, in order to restrict the number of natives to the bare requirements of urban employers. Southern Rhodesia and Kenya have pass systems, but in both cases the regulations are simpler and less exacting than those of the Union, partly because of historical differences, but largely because the system of registration in force acts as a measure of control. In Southern Rhodesia the Native Pass Ordinance of 1913, as amended, requires all indigenous males over 14 years of age, and all non-indigenous males of that age entering the colony to obtain registration certificates. The non-indigenous males must also take out passes to travel within the colony in search of work. Within the towns natives engaging for work (and their employers) must enter into contracts of service stating rates of wages before a registrar. These contracts are mostly for periods of one month, but the parties can, if they so desire, contract with each other for longer periods. This provision has been re-enacted in the Natives Registration Act of 1936, which also provides an extended system of control over natives entering scheduled townships. Outside the native locations established under the Native Urban Locations Ordinance of 1906 a modified curfew law is in force in the towns. Natives entering them must obtain a pass to visit or seek work, which may be refused for specified reasons. The Act provides for the appointment of registrars of natives and Town Pass Officers, who are to assist natives to find employment and to aid and protect them in their transactions with Europeans.

Kenya has carried the registration system somewhat further. The use of pass laws originally arose in the need for a measure of defence against wandering tribesmen and stock thieves; it was only at a later date that they were utilized to meet labour difficulties. The registration of labourers, as introduced under the Masters and Servants Ordinance of 1910, proved ineffectual, and the government, on the advice of the Native Labour Commission of 1912-13,¹ adopted the Southern Rhodesia law of registration. Every native over the age of 16 years must register and carry a registration certificate,² but the latter provision is, in practice,

¹ *Report*, para. 3, p. 335.

² *Report on the financial Position and System of Taxation in Kenya*, 1936, Colonial 116, para. 224.

applied only to natives outside the reserves. An employer must endorse this certificate on engagement and discharge, and fresh employment is not legal without this formal discharge. As the result of experiences with the carrier corps during the War a Central Registry had been established, which contained records of all the certificates registered. It was an institution to which the administration attached importance as a means of establishing identity and preventing fraud, but it has now been abolished. The pass system in Kenya has its critics,¹ but there is not the same complaint as in the Union of the abuse of the regulations. It is in particular noteworthy that executive orders prohibit police officers below the rank of sub-inspector from arresting natives on the ground that they do not hold a registration certificate.²

Northern Rhodesia has a Native Registration Ordinance, 50 of 1929, but its system of registration differs from that of Kenya, as it has no central bureau of registration. It may be noted that the prevalence of the wandering wage-seeker has of late years created a problem of much difficulty to the administration. The system was introduced to check desertions, but it appears to be inefficient as a means of establishing identity, and many employers hold the view that the procedure needs revision. In Nyasaland no passes are required, save for natives leaving the protectorate, a provision which has fallen largely into disuse, but the Committee on Emigrant Labour, 1935,³ advocated the introduction of a pass system as a means of ensuring the identification of the labourer; it is noteworthy that they found no evidence that registration in Kenya and Southern Rhodesia imposed any real hardship on the native. In Tanganyika a system of registration was recommended by a government committee sitting in 1929, and the Identification Ordinance of 1935, which applies to members of all races, requires a person not holding a passport to carry an identification certificate if he leaves the province in which he is domiciled. The ordinance, however, has not been put into effect. The committee of 1936-7 appointed to advise on questions relating to the supply and welfare of native labour considered that the cost of such

¹ See N. Leys, *Kenya*, 1924, p. 389.

² *Report of the Commission of Enquiry into the Administration of Justice in East Africa*, Cmd. 4623, 1934, p. 83.

³ *Report*, op. cit., para. 132.

a system places it outside the realm of practical politics. It suggested that facilities might be made available for voluntary registration to provide evidence of domicile.¹ A pass system, designed to exclude undesirables, operates in the area of the Lupa gold-fields. The pass system is not used in the British West African colonies, though in the Gold Coast domestic servants of Europeans are registered by the police.

In the French colonies there is no system of passes prescribed by law. The law, however, provides that a native on entering employment must receive a *livret d'identité* containing personal details and particulars of engagement.² This regulation is intended to apply mainly to persons seeking industrial employment, but the administration applies by local order a temporary system of passes to regulate movement in areas suffering from epidemics. In the Belgian Congo there is also no regular pass system, but as part of the labour regulations an employee receives a *livret de travail* containing details of the times and conditions of employment, engagement, and discharge. The importance attached to the stabilization of domicile within the *circonscription* has led to the adoption of a system by which a native must obtain a *passeport de mutation* before he leaves his district or goes to an urban centre; this may be either temporary or 'definitive'. The system is used to restrict movement in the case of epidemics, or during the continuance of an intensified campaign of medical work in a particular area, and also to prevent excessive numbers of men from leaving certain areas. In the Portuguese areas natives leaving reserves to seek work must obtain a 'native card', and must, on entering employment, obtain a work card from the employer.

(b) *General Conclusions*

In judging the merits of the pass system it is necessary to discriminate between what may be described as its direct and its indirect use. The former is limited to securing a means of identification and to assisting in the maintenance of contractual obligations; in the latter, the pass is an instrument serving some aspect of political or social policy. Thus, as has been shown, in the Union

¹ *Report of the Committee appointed to consider and advise on the Supply and Welfare of Native Labour*, 1938, p. 42.

² A.O.F. *Arrêté* of March 29, 1926. A.E.F. Decree of May 4, 1922.

the Natives (Urban Areas) Act of 1923 and the Native Service Contract of 1932 include, as part of their machinery, the use of a pass system which is undoubtedly burdensome in its operation; the justification for the system must in this case depend on the merits of the general policy which it serves. There is, on the other hand, a general agreement on the merits which the pass possesses as a means of identification and of assistance in the observance of labour agreements both by employer and employee. Here it has a legitimate function, and it becomes oppressive, as the various authorities who have advised on the subject have pointed out, only if the procedure for its use is complicated, or if precautions are not taken to avoid its abuse by subordinate officials of the government or native administrations.

VIII. WELFARE AND WAGES

(a) The Regulation of Welfare Conditions

All the territories under review have now made provision, in greater or less measure, for safeguarding the welfare of labour. The laws vary greatly in character, and it is only possible here to discuss the more important provisions, such as those relating to the regulation of diet and working hours, housing, and compensation for accident or disease. In the Union the employment of a large number of Europeans and the comparatively high degree of industrialization have presented many problems of a type familiar in older countries. The Department of Labour and Social Welfare, established in 1924 after the constitution of a Ministry of Labour, was, in 1937, divided into departments of Labour and of Social Welfare; they administer employment exchanges at the chief urban centres for European adults and juveniles, and also for coloured persons at Capetown and Kimberley, while at some 200 other centres post offices serve as subsidiary exchanges. The departments' other functions include the training of indigent Europeans for employment, the initiation and control of schemes for the relief of European and coloured unemployment, and the development of social work amongst Europeans, for which purpose a Commissioner of Social Welfare and a number of rural welfare officers were appointed in 1935. An inspection staff of fifteen supervises the conditions of factory labour, which are adequately regulated by

rules under the Factories Act of 1918 as amended by Act 26 of 1931. The regulations place restrictions on the working hours of juveniles and women, and the Mines and Works Act, 1911, and the Factories (Amendment) Act, 1931, prescribe a 48-hour week.

The conditions of health, housing, and diet for natives employed on mines and works in proclaimed labour districts are governed by the Native Labour Regulation Act of 1911, which leaves a wide discretion to the executive in making rules for the purpose. The operation of the Act is entrusted to a Director of Native Labour, with head-quarters at Johannesburg. The compounds of the Rand mines are open to the objections inherent in a system which brings together a very large number of male workers, removed for periods lasting from twelve to eighteen months from any possibility of contact with domestic life; so far, however, as the arrangements for housing and diet are concerned, the larger mines have admittedly set a high standard; the provision made is liberal and well planned, while health conditions receive careful and scientific study. The mortality rate in 1936 was 7·06 per thousand.¹ The overcrowding that once existed on some of the smaller properties is now being reduced through the activities of the Public Health Department, which requires new barrack rooms to conform to certain specifications. The department also supervises housing on the Natal sugar plantations, where the campaign against malaria has drawn attention to the existence of many unhygienic compounds for native labour. The conditions of farm labour are not subject to inspection, nor are minimum standards of diet, housing, and medical attention prescribed; but the grazing and arable rights granted to many natives on European farms, and the fact that the worker leads his own domestic life, give some attraction to agricultural employment in spite of the unfavourable nature of other conditions. The general position of the labourer seems to justify the recommendation made by Mr. Lucas,² as member of the Native Economic Commission of 1930-2, that inspectors should be appointed for farm labour, and in particular to supervise the operation of the Masters and Servants Acts.

¹ *Transvaal Chamber of Mines, Annual Report, 1936*, p. 6.

² *Report of the Native Economic Commission, 1930-2, Addendum*, para. 280.

Compensation for industrial disablement is provided under the Workmen's Compensation Act of 1934. Up to the passing of that Act, compensation for natives was available only under the Native Labour Regulation Act of 1911, which made no provision for temporary disablement. The Act of 1934, which applies to natives, constitutes a material improvement in this and other ways; it makes provision for the appointment of an officer of the Native Affairs Department for examining into cases entitled to compensation, and assessing and collecting the amount due. Compensation for the special disability arising from silicosis in the mines is provided under the Miners' Phthisis Acts, which were consolidated in Act 35 of 1925.¹ Compensation is on a markedly liberal basis for Europeans; the scale for natives is lower, and it has been maintained that natives, owing to the intermittent character of their employment, are less susceptible to the disease.² The compensation given to natives might prove to be of greater benefit if the system permitted of the grant of a pension in suitable cases, instead of a lump sum.

In South-West Africa compensation for disablement or death is provided by Proclamation 27 of 1924. Inspection of labour is at present confined to the employment of an inspecting officer at the Tsumeb copper mine when it is working, and another officer in the Lüderitz diamond-fields.

In Southern Rhodesia there is no separate Department of Labour, but under the agreement with Northern Rhodesia and Nyasaland³ the number of Native Department Inspectors will be increased from two to seven. The conditions of native labour are regulated by the Native Labour Regulations Ordinance 1911 and regulations framed thereunder, and the Masters and Servants Ordinance 1901. For mine labour there are comprehensive regulations framed under the Mines and Minerals Act, 1935, with standards of diet and housing. Compensation for industrial disability is provided under Ordinance 15 of 1922 as amended by Act 16 of 1930, but it is awarded on a fixed scale which makes no provision for natives drawing anything but low rates of pay. It would seem that conditions in the larger mines are adequately

¹ See Chap. XVII, p. 1148.

² *Report of the Low Grade Ore Commission*, U.G. 16, 1932, par. 104.

³ See p. 654, above.

supervised; the conditions in the numerous small mines and undertakings dealing with alluvial or quartz workings, where labour is often of a casual nature, have received little attention. The Wankie coal mines stand by themselves in the extent of welfare provision; the labour here is largely 'stabilized'.

In Northern Rhodesia conditions are regulated by rules made under the Employment of Natives Ordinance of 1929. Regulations of 1931 laid down a scale of diet for natives employed in mines and works and provided for minimum housing requirements.¹ The ordinance provides for the payment of compensation in lump sums. Accidents in the mines sometimes result in cases of blindness and total disablement, and provision for pensions seems desirable. Ordinance 41 of 1930 provides for the appointment of a Commissioner for Labour and labour officers, but no action in this regard has been taken as yet, supervision remaining in the hands of administrative and medical officers. The establishment of a Labour Department is, however, under consideration. The main problem of industrial labour in Northern Rhodesia is that of the mining population in the copperbelt, the monthly average of men employed in 1935 being 18,464. The mine companies provide food, housing, and medical attendance: the standard is liberal and well planned. Labour is employed at the mines on a monthly 'ticket', and while the copper mines have not yet adopted any fixed policy of 'stabilization' of labour, similar to that now in force in the Belgian mines,² they have of recent years made a considerable provision for families in the labour lines. Schooling has been left to the enterprise of the United Copperbelt Missions, who have received small grants from the mining companies, but government is now building three elementary schools; recreational schemes are organized by the mines, missions, and in connexion with the beer canteens. The period of construction was marked by a high rate of sickness and mortality; but the mortality rates from sickness had fallen to 10.8 per 1,000 in 1932 and 7.87 in 1933; an increase in 1934 to 13.6 was attributed to influenza. The fatal accident rate is approximately the same as in the Union mines, being 2.64 per 1,000 in 1934. Little supervision is exercised over the conditions of farm labour, the wages are low, and the conditions

¹ See Chap. IX, pp. 512-15.

² See below, p. 681.

as regards housing and rations are officially described¹ as being frequently far from satisfactory.

The Nyasaland rules of 1914 contain a minimum scale of diet and provide that conditions regarding housing may be inserted in contracts; there is little labour of the industrial type, and inspection is left to administrative officers. In 1936 Kenya had 182,858 natives registered as in employment; of those about 11,000 were employed in mines and 28,160 on railways, harbours, and other government works, while a small number were employed in minor industries such as sugar and saw mills. The colony has recognized the importance of the supervision of labour conditions, and has instituted a labour section under a Principal Labour Inspector, with four labour officers; the regulations prescribe a scale of diet, but this applies so far only to men in government employ. The labour section gives attention to conditions of labour employed on farms, mines, and works of all kinds, and arranges for the repatriation of vagrants and discharged prisoners. It undertakes the maintenance of rest camps and of an employment bureau. The few large mining undertakings make suitable provision for the welfare conditions of their labour; the conditions of labour in the alluvial diggings, where labour is largely casual, leave much to be desired. Compensation for disability among miners is governed by an amendment (1934) to the Mining Ordinance.

Tanganyika appointed a Labour Commissioner and labour officers under the Masters and Servants Ordinance of 1928, but this establishment was abolished in 1931, the bulk of labour supervision being transferred to administrative officers. The law, at present, does not prescribe scales of diet or housing, but penalizes conditions shown by inspection to be inadequate. Compensation for injuries is provided under section 29 of the Masters and Native Servants Ordinance, and section 9 of the Mining (Amendment) Ordinance 1931. For general labour purposes one officer of the Labour Department has been reappointed, and an officer has been posted to deal with labour conditions in the Lupa gold-fields.² The Report of the Committee of 1936-7 on the Supply and Welfare of Labour gave details of the unsatisfactory conditions

¹ *Annual Reports on Native Affairs*, 1934, p. 27; 1935, p. 19.

² But see below, p. 677.

on the Lupa gold-fields; evidence of inadequate supervision of health conditions on plantations had already been provided by a representative of the Ross Institute of Tropical Hygiene. The Committee recommends the restoration of the Labour Department under a Chief Inspector of Labour, and the formation of a Labour Advisory Board, and considers that the labour inspectorate should pay particular attention to the conditions of the employment of young persons, as it finds that children are working in the gineries on shifts of eleven to twelve hours, a state of affairs which, it suggests, also points to the urgent need of legislation to limit the duration of working hours.¹ Among the recommendations of the committee are statutory compensation for workmen and minimum wage-fixing machinery. The government has in view labour legislation which will presumably include many of the recommendations of the committee. The unsatisfactory nature of the conditions prevailing among the large population of natives on the scattered workings of the Lupa gold-field was admitted by the government in its report to the Mandates Commission,² but steps have now been taken to improve them. These conditions were no doubt partly due to the system of granting licences to individual prospectors who have not the means nor the will to provide the facilities which are available to the employees of large companies. It is, however, also true that the government did not until 1937 provide adequate control over the operations of the prospectors, nor did it make adequate medical provision for the workers.

In Nigeria the problems connected with industrial labour exist mainly in the tin mines, where a monthly average of 18,600 workers was employed in 1935, and in the alluvial gold-fields, which had a labour force of about 14,500. Regulation 6 of 1929 makes special provision for areas proclaimed as labour health areas, in which definite standards of diet and medical attendance are prescribed; elsewhere, welfare obligations are of a general character only. Compensation for injuries in mining employ is provided under the Minerals Ordinance, and under the Labour Ordinance of 1929. It is important to note that supervision and

¹ *Report*, 1938, p. 35. A Chief Inspector and seven officers are being appointed in 1938.

² *Report to the Council of the League of Nations on Tanganyika Territory*, 1936, p. 81; *Minutes of the Thirty-first Session of Permanent Mandates Commission*, 1937, pp. 41-6.

inspection remain in the hands of administrative officers. Labour in the tin mines and in the gold-fields is mostly on weekly agreements: it does not come from any considerable distance, and provision for housing or other amenities is not made on any prescribed scale. Labour on the government coal mine at Enugu, however, is of a more stabilized character, and adequate arrangements are made for housing and sanitation. The advantages of a proclaimed labour health area may be seen in the Cameroons; the plantations here employed about 15,000 workers in 1935, and the provision for housing and medical attendance is on a prescribed scale. The Nigerian Labour Regulations provide that no labourer shall be allowed to work more than ten hours a day.

In the Gold Coast the gold industry employed in 1935 a daily average of about 34,000 men. Throughout the Gold Coast labour is, as in Nigeria, engaged on daily or weekly rates, and there is little use made of the labour contract. As in Nigeria, provision is made for proclaiming mining health areas, but enforcement of the regulations is only now being taken in hand, and no special inspectorate has been appointed. The larger mines provide housing arrangements and adequate medical attendance, with the result that the daily labour turn-out has become more satisfactory; but considerable difficulty is experienced by these mines, owing to the fact that they have little control over the settlements on private property near the mines. Elsewhere, little provision exists for housing, nor are welfare conditions under definite control. There is as yet no legal provision for workmen's compensation, nor is there any statutory regulation of hours of work; the average period of labour in Gold Coast mines appears to be eight hours for underground, and nine to nine and a half hours for surface workers.

Labour regulations in many of the British colonies have a common characteristic: they avoid laying down definite standards in regard to diet, housing, or medical attendance, and leave in these matters a considerable discretion to inspecting officers. Particular importance accordingly attaches to the character of the organization for inspection and supervision. The matter is indeed one of special importance in any situation in which contract labour is largely used. Whatever advantages contract labour may possess in other directions, it inevitably has one disadvantage, that

unless there is adequate supervision by the state, it weights the scale in favour of the employer, in so far that it is easier for him than for the labourer to evade his obligations. In Europe the earlier attempts to improve mine and factory conditions failed of effect until a technical inspectorate was appointed; this was conspicuously the case in regard to the regulation of hours of labour for women and children. It is, indeed, obvious that the efficacy of social legislation as a whole is dependent on the technical inspectorates which are the most significant creation of modern administrative activity. In the preceding pages some details have been given of the extent to which an organization for this purpose exists in the Union and the British colonies, and similar details will subsequently be given in connexion with the French and Belgian territories. It has been shown that, with the exception of Kenya, inspection in the British colonies has for the most part been left to administrative officers.

That it is advisable for officers of the administration to keep in close touch with labour conditions admits of no question; but experience shows that their other duties do not always permit them to exercise that close supervision which is essential when large bodies of labour are employed. The Report¹ of the Commission on the Disturbances in the Copperbelt of Northern Rhodesia pointed out in 1935 that District Officers had inadequate acquaintance with the conditions in the compounds, and stated that the mining authorities themselves would welcome a closer contact on their part. The Committee on Emigrant Labour in Nyasaland² stated that their investigations had been hampered by an absence of reliable statistics of labour emigration, and emphasized the need of a labour department to supervise the safeguards which they thought necessary.³ Reference has been made on a preceding page to the similar recommendations made in regard to Tanganyika. The value of a specialized labour department is by no means confined to the exercise of closer inspection; it is, as pointed out by the Nyasaland Commission, equally essential in order to place the administration in a position to deal with the wide range of problems, vitally affecting many aspects of native life, to which the movement of labour gives rise.

¹ Paras. 93, 94.

² See p. 639.

³ *Report*, 1936, paras. 74, 165.

French legislation on welfare conditions is fuller and more precise in form than that of many of the British colonies. The *arrêtés* of March 29, 1926, in French West Africa and February 11, 1923, in Equatorial Africa prescribe a maximum of ten hours' labour both for industrial and farm workers, with a special provision in the latter territory that the hours must not exceed six per day in the first and eight in the second month of employment. A decree of French West Africa dated September 18, 1936, laid down special conditions for labour of women and children, including a childbirth interval. Detailed standards are prescribed for medical facilities. Compensation for industrial disablement is provided by the decree of April 2, 1932, which was applied to French West Africa on July 30, 1936, and there is special provision made to assist workmen in effecting savings, through the system of the *timbre de pécule*. There is an inspectorate establishment in French West Africa with a specially trained personnel; the inspector has authority to arbitrate in disputes or refer to the *conseils d'arbitrage*.¹ The inspectorate in French Equatorial Africa, established by an *arrêté* of August 24, 1936, is on a less developed scale.

Attention has been drawn in previous pages to the close study given to labour in the Belgian Congo.² Welfare conditions there are governed by detailed regulations. The principal law is the decree of March 16, 1922, which, among other matters, gives power to local authorities to prescribe a statutory scale of diet for workers. This has been implemented by local regulations laying down scientifically balanced scales of diet, and requiring employers to supply all manual workers with prescribed rations in addition to the cash wage. The dietary of labour has received in the Belgian Congo a systematic study to which the only African parallel is that made by the health organization of the Rand mines. Another characteristic feature of the Congo is the provision in each province of an Advisory Council for labour questions consisting of five officials and five non-officials. Supervision is carried out by a special organization, centring in the labour office at Léopoldville, with a local inspectorate, and a labour officer has recently been appointed for the mandated territory of Ruanda-Urundi. The

¹ See above, p. 662.

² See above, pp. 644-8.

inspectorate is active; but apart from this, there is every evidence of the attention which the larger industrial organizations pay to the welfare conditions of their labour.

The scarcity of local population led in the earlier days of the Katanga enterprises to the recruitment of natives from a distance, and as a result of the high percentage of disease experienced, and of the disturbance to native life in the areas of recruitment, the mines have progressively adopted a policy of 'stabilizing' their labour, some aspects of which have been described.¹ Stabilization is also a necessary corollary of the policy under which Africans are given the fullest opportunity to qualify themselves to take the place of Europeans in skilled processes.² It involves a policy of engagement on long term contracts, the normal period being three years, and of encouragement of family residence; the *Union Minière du Haut Katanga* assists workmen to provide the dowry for their marriage, and its very complete maternity and child welfare service has already been referred to.³ In many cases family allotments are provided; older men are employed on farms organized by the company. In 1934 over one-third of the labour was accompanied by its families, and this figure has apparently since increased. The sickness and mortality figures, which in the earlier stages of work were high, owing to the fact that a large proportion of the recruited labour was brought from long distances, have now been greatly reduced. The mortality in 1914 was no less than 117.7 per 1,000; it had fallen to 12.03 in 1931⁴ and in succeeding years was 8.23, 7.01, and 5.94. The food supplied is calculated to cost 4.69 francs a day against the average pay of 3.72 francs. A similar system has been introduced in the Kilo-Moto mines; here, however, the mortality figures are higher, being in 1933 between 15.7 and 16 per 1,000. The concessions given of recent years require expenditure to be made for social work on behalf of labour. An instance of this kind is the expenditure of the *Huilleries du Congo Belge*, which has spent in the last five years

¹ See M. Engels, *Problème de la main-d'œuvre du Congo belge*, 1931.

² See below, p. 692.

³ See also the article by Dr. Mottouille in the *Bulletin international de la protection de l'enfance*, June 1930.

⁴ R. Mouchet, 'Medical Assistance to Natives, with special reference to the Belgian Congo', *East African Medical Journal*, vol. ix, no. 9, 1932.

nearly 17,000,000 francs on medical work,¹ and over 5,000,000 francs on education.

In the Portuguese territories the former law regarding labour, the Native Labour Code of 1928, was revised in the Law of November 15, 1933. This law contains provision for rules establishing minimum wages, insurance for industrial disability and pensions, and welfare conditions; it remains, however, to be implemented by the issue of local regulations. It further makes provision for a labour inspectorate, to be controlled from Lisbon, but it is understood that this has not yet been appointed. An order of July 1930 prohibited the sale of alcohol to employees, and in the opinion of those who have had experience of previous conditions in these areas, this provision will, if it can be carried out, effect a much needed reform.

(b) Wage Determination and the Civilized Labour Policy

There is an aspect of state policy in certain African territories which has a conspicuous effect on the position of native labour in industry, and on its capacity for wage-earning. What has come to be known generally as the 'civilized labour policy' is, as will be seen, a feature confined mainly to the Union and Southern Rhodesia, where the employment of a resident white population has in recent years become a question of political and social importance. The general policy of the Union has been described elsewhere² as regulated by the determination to maintain the essentials of European civilization in the interests of its white population. In the economic field this policy has two objectives: first, the maintenance of the wages of all European employees at standards appropriate to 'civilized labour'; and secondly, the restriction of the native in European-settled areas to unskilled labour, remunerated at rates suitable to native conditions. The essential feature of these conditions is assumed to be, that the native employee is not entirely dependent on wage-earning, and that he and his family can, if necessary, draw their subsistence from the land, the wage thus representing only a means of satisfying requirements which have to be met by cash expenditure. The difficulties inherent in the maintenance of an economic re-

¹ See Chap. XVII, p. 1180.

² See Chap. V, pp. 130 ff.

lationship of this type in a modern industrial state are discussed elsewhere;¹ here it is proposed to refer only to certain features which characterize the present operation of this policy.

The high standards of pay of European employees, as the analysis contained in the report of the Economic and Wage Commission of 1925² shows, are due to the historical circumstances under which industry has developed in South Africa, and they are to-day maintained chiefly by the prosperity of the gold industry. While comparison between the wage rates of different countries is not easy, owing to the difficulty of determining real wages, the figures prepared by the Statistical Department of the Union³ provide a useful indication of the position of European labour in South Africa relative to that in other countries. Taking the building trade as typical, it is shown that in 1934 the weekly wage in South Africa was 122s. 1d. as compared with 102s. 7d. in Australia, 90s. 9d. in New Zealand, 133s. 10d. in Canada, and 65s. 6d. in the United Kingdom. The indices of real wages in the building trade compare as follows: South Africa 1,092, Australia 1,146, New Zealand 1,009, Canada 1,436, and the United Kingdom 883. For the present purpose, however, the fact of major importance is not the general pitch of European wages, but the relation of European wages to those of unskilled labour, which is predominantly, if not exclusively, native or 'coloured'. The precise relation cannot be stated in terms of average figures, owing to the variety of rates paid in the secondary industries and on the farms, but there are certain figures which supply an adequate illustration. The average pay of the European employee in the mines, on the basis determined by the Wage Board in 1927, worked out in 1930 to £31 7s. a month; that of the native employee worked out in the same year to 57s. 6d. a month, but to this must be added a sum representing the calculated cost of food, and other charges borne by the mines. The value of this to the native has been stated to be 1s. 4d. or 1s. 6d. a day; calculations made by the Native Economic Commission⁴ in regard to a number of mines showed the cost to them as 8-46d. for food and hospital privileges, and other services such

¹ See Chap. XX, pp. 1369 ff.

² U.G., 14, 1926, pp. 84-6.

³ *Official Year Book of the Union of South Africa*, 1934-5, p. 243.

⁴ *Report*, U.G. 22, 1932, paras. 819-20, 824-5.

as repatriation of sick workers and irrecoverable advances, but not including the cost of quarters. In the secondary industries the wage of the European is lower, and that of the native somewhat higher; the general ratio of native to European wages would appear to be roughly 1 to 5,¹ as compared with 1 to 8, or 1 to 6 (according to the value assigned to the additional charges) in the mines. In Europe the common ratio of skilled to unskilled wages is estimated at 7 to 5 in the building and engineering trades.

The policy which seeks to maintain separate standards of industrial remuneration is in its origin based on a distinction of social status and not of industrial skill. While it is clear that the great mass of native workers cannot be regarded as skilled, there are stages of industrial work in which the native would, if permitted, come into economic competition with the European; and though the various attempts made to assess the comparative value of European and native labour in this common field² cannot have any scientific accuracy, it would be just to say that, even in present conditions, the disparity in wages is clearly greater than is warranted by the difference in the capacity of the two classes. A recent official inquiry expressed the view that, even on the most favourable estimate of the superiority of European over native labour, an equivalent margin above prevailing native wages would be insufficient to make up for the generally accepted difference in standards of living between the two races.³ It is due in the main to the necessity which has been felt for making possible the maintenance of this social distinction that the Union has recognized the principle of the 'civilized labour policy'.

Apart, however, from the problems which such a policy would normally involve, the position has been complicated by the situation of the 'poor whites', or Europeans who are not qualified for skilled industrial employ. They are drawn largely from the *bywoner* class on the farms, who have migrated to the towns. The calculations which have been made of the numbers of those who may be held to fall within the category of 'poor whites' vary widely according to the definition adopted; the estimate made in

¹ *Report of the Industrial Legislation Commission*, 1935, p. 15.

² *Report of the Economic and Wage Commission*, 1925, p. 84; *Report of the Carnegie Commission on the Poor White Problem in South Africa*, 1932, part i, pp. 163, 179.

³ See *Report of the Industrial Legislation Commission*, 1935.

1916, which held the field for many years, indicated that there were 39,000 'indigent' and 67,500 'very poor'; the more recent investigations of the Carnegie Commission,¹ without pretending to an accurate enumeration, suggested that they might be considered to represent a population group of 220,000 persons. In a normal economy these persons would be in the ranks of unskilled labour. In South Africa, however, the accepted social philosophy precludes the acceptance by Europeans of the rates of wages which prevail in such employment, and it has been necessary for the government, in order to provide them with work at rates more nearly approaching those suitable to 'civilized' standards of living, to set on foot, either directly, or through local bodies, a large number of subsidized works,² as well as to institute a special service battalion, and also a pioneer battalion designed to give employment and industrial training to the younger men. The rates of pay given are intermediate between those of the standard wages of European labour and those of the native; there are no figures available of the total cost to the state of these measures, but the range of expenditure may be judged by the fact that in 1933 there were 30,200 Europeans employed on subsidized state relief works and special schemes, and 8,500 on subsidized municipal relief works. These numbers, however, include a certain proportion of unemployed skilled or clerical workers; and with improvement in industrial conditions some reduction has taken place. There were in 1936 some 12,500 men on state and municipal relief works and the same number on subsidized special works.

In addition to these measures, the principle of the 'civilized labour policy' has been employed to effect the substitution of European unskilled labour for native or coloured employees in state establishments, and local bodies have been required to employ a prescribed proportion of European labour in their regular services, being compensated by subsidies from the state for this purpose. The influence of the Labour Department is being utilized to secure the co-operation of private employers to the same end, with the result of a considerable displacement of 'coloured' and

¹ *Report*, op. cit., p. vii.

² For a list of works see the *Official Year Book*, 1937, op. cit., pp. 281-6.

native labour. The measures taken for the support of the poor whites are viewed in the Union as of a temporary nature, necessary only until the steps taken for their education and industrial training have fitted them to take their place in the ranks of skilled workers. But the problem of the poor white exercises a far-reaching influence on Union policy, and its effect may be observed not only in the government's attitude to questions of wage determination, but in measures for the promotion of the secondary industries. It is all the more marked, because the system of adult European suffrage gives this class a significant weight in the electorate. The 'civilized labour policy', in seeking to maintain the present level of European wages, is further served by the insertion of a wage clause into all government contracts, which exercises an extensive influence also over the scale of wages in private undertakings. It is also important to note that the Tariff Act is deliberately used to secure the employment of a specific ratio of European to native labour in certain protected industries.¹

Provision for the determination of wages is made by the Industrial Conciliation Act 11 of 1924 (as amended by Acts 24 of 1930 and 7 of 1933), which establishes machinery for giving legal effect to agreements between employers and organized bodies of labour, and to awards on arbitration; the Wage Act 27 of 1925 further provides that, after inquiry by a board appointed for the purpose, the Ministry may make a determination of a minimum wage in any branch of trade or industry. The former Act has been widely used, and has given a stimulus to the organization of associations and unions both by employers and employees; it has been of acknowledged value in reducing the number of industrial disputes. But it does not apply to agricultural labour, and since natives are not, save in very rare instances, admitted as members of European trade unions,² it has not operated in regard to the regulation of native wages. The board constituted under the Wage Act had by 1935 made recommendations which resulted in determinations in regard to fifteen branches of trade, mostly with local but in a few cases with general application throughout the Union, and a substantial rise of wages for a number of urban workers has followed.

¹ *Report of the Customs Tariff Commission, 1934-5*, U.G. 5, 1936, para. 354.

² See p. 688, below.

The scale of native wages is, as has already been stated, based on the assumption that the native can, if necessary, draw his subsistence from the land. It is, however, apparent that there is a growing proportion of natives who cannot maintain themselves within the restricted area of the reserves at the standards of life now prevailing; to them wage-earning has become a necessity, and in their case any scale is inadequate which is calculated on the 'male adult' and not the family basis. This class, however, is restricted in the possibility of improving its position by the fact that employers can still count on recruiting a considerable body of labour, partly in the Union but largely in outside areas, among natives who can find subsistence for their families on their own lands. The centralized system of management on the Rand mines, described elsewhere,¹ has succeeded in maintaining the scale of native pay in the mines at approximately the same rate for many years; the average for all underground labour was calculated by the Native Economic Commission² to be 2s. 0½d. per shift in 1914 and 2s. 2½d. per shift in 1930, and no increase in rates has since taken place. There were in the interval fluctuations in general price levels amounting to over 48 per cent. without any corresponding variation in the scale of native pay. It is not easy to calculate the precise relation of real wages in 1914 and 1930; but it is clear that the prices of many articles of native consumption, such as clothing, have risen; the general standard of native expenditure has increased, and European wages in the mines rose nearly 20 per cent. between 1914 and 1930. The European miner has also in recent years received large additional benefits in the nature of provision for pensions and holidays; in 1935 the fund established by the mines for this purpose amounted to over £1,000,000. Of 65,944 natives employed in secondary industries in 1932-3, 48·5 per cent. received an annual average wage of between £27 and £40, 44 per cent. were paid from £40 to £50, and 7·5 per cent. from £50 to £62. About 20,000 are employed on the railways at an average monthly wage of 63s. 2d. The rates of pay given to hired workers in rural areas vary greatly, and apart from the details given in the Native Economic Commission Report,³ largely based on the investiga-

¹ See Chap. XXII, p. 1488.

² Op. cit., pp. 132, 315 ff.

³ *Report*, op. cit., para. 828.

tions of Drs. C. H. Neveling and J. C. Neethling, no comprehensive statistics are available. The general wage of hired workers is shown to be on a lower basis than in the towns, the minimum quoted being 5s. a month with food, with a maximum (in very exceptional cases) of £3 a month, but to this must be added the value of the privileges usually allowed, such as land for cultivation or grazing. Labour tenants in some cases receive no cash wages.

Not only is the scale of native wages affected by competition from natives, residing both within and without the Union, whose families remain within their own subsistence economy, but the state supports the 'civilized labour policy' by legislative measures designed to prevent natives from entering into the higher grades of skilled employment, and thereby reducing the openings available to European labour. The economic aspect of these measures will be discussed elsewhere;¹ it is here sufficient to describe the more important of the measures directed to this end. One of the most conspicuous is that generally known by the name of the 'colour bar' law. The law is that embodied in the Mines and Works Amendment Act of 1926, which authorizes government to make regulations providing that certificates of competency in certain occupations shall be granted only to Europeans and certain classes of 'coloured' persons; in practice the regulations issued apply only to the grant of certificates of competency for certain operations in mining. The law was not in itself an innovation; there had from the first existed a customary colour bar in the mines. Its existence was recognized in the Transvaal Labour Importations Ordinance of 1904 and again in regulations framed under the Mines and Works Act of 1911, and the law of 1926 was passed as the result of a decision of the courts in 1923 that these regulations were *ultra vires*. Though, however, the operation of the legal colour bar is confined to the mines, the Trade Union system applies in practice a colour bar discrimination in most of the skilled trades. At the moment this operates as a restriction only on that small proportion of the native labour force which is qualified for entry into skilled employment; but it has a wider influence in depriving natives of the incentive to qualify themselves as 'skilled' workmen, and in maintaining the system

¹ See Chap. XX, p. 1369 ff.

under which native labour is as a whole remunerated at 'unskilled' rates. The apprenticeship system, as applied to certain trades,¹ by laying down standards which make it practically impossible for natives or the majority of coloured persons to enter into apprenticeship, further restricts the opportunities for non-Europeans to rise in the industrial scale. These measures are reinforced by the effect of the laws regulating the combination of labour in order to improve its conditions. The Industrial Conciliation Act, as has been shown, does not admit natives to its benefits; the specific exclusion is that of employees who are 'pass-bearing natives,' but in effect this excludes all natives outside the Cape.² While Europeans are allowed to strike after giving the notice prescribed in this Act, the Masters and Servants Act makes it an offence for natives under labour contract to withhold service without giving statutory notice of the termination of their contract. The Riotous Assemblies Amendment Act, 1930, can be, and has on occasion been used to remove persons interested in organizing unions of native labour; and the pass law regulations³ have been utilized to prevent their access to natives in the reserves. These obstacles have not entirely prevented the combination of natives, as the history of the well-known Industrial and Commercial Union (the 'I.C.U.') has shown. Founded in 1920, it was claimed by some of its leaders to have had a membership of over 100,000, though it is doubtful if these numbers were actually attained. Though it took a considerable part in labour troubles in 1921 and 1922, its membership was not confined to workers, and its character was rather that of a political association than of a labour union.⁴

The economic policy of Southern Rhodesia, like that of the Union, assumes a separation of labour into two classes based on a racial discrimination. As is shown by Professor H. Clay,⁵ the scale of European wages still reflects the conditions which made it

¹ By Act 26 of 1922 amended by Acts 15 of 1924 and 22 of 1930.

² See *Report of the Native Economic Commission*, 1930-2, Addendum, paras. 293 ff., and *Report of the Industrial Legislation Commission*, 1935, p. 69.

³ See above, pp. 664-72.

⁴ Dr. C. Leubuscher's book, *Der südafrikanische Eingeborene als Industriearbeiter und als Stadtbewohner* (1931), pp. 177 ff., gives a description of the development and character of the I.C.U. It also contains much useful material on the position of the native in South African industry.

⁵ *Report on Industrial Relations in Southern Rhodesia*, 1930.

necessary to attract skilled workers to a new country; they are in terms of money somewhat higher than in the Union, though in real wages the superiority is not so great. Thus, in 1930, it was calculated that in a selected class of occupations the money wages were about 25 per cent. higher than in the Union, but that the cost of living in Southern Rhodesia was about 15 per cent. higher. The number of European industrial employees or artisans is comparatively small; in the mines, for instance, the ratio is one European to twenty-one natives as against about one to eight in the Union. Though the money wages of European labour are higher than in the Union, the native wage is on a lower scale; in the mines, for instance, the average wage of native labour in 1935 was 20s. 1d. a month with food, the rate having been reduced from 28s. 2d. in 1930,¹ as compared to the all-round rate of 57s. 6d. in the Union; farm and road labour is paid on a scale which approximates to that of East Africa rather than of the Union. The gap, therefore, between 'skilled' and 'unskilled' standards is wider even than in South Africa. The lower rate of native wages has been accounted for in the past by the prohibition of the recruiting of natives for the Rand mines north of latitude 22. Even were that restriction entirely removed, the extra cost of travel to the Union would still operate to prevent a general southward migration in search of higher wages.² Moreover, the standard of native living is lower in Southern Rhodesia, in the sense that the demand for European goods is less developed; and the existing rate is sufficient to attract natives from territories farther north where the prevailing wages are even lower. Though the policy of Southern Rhodesia looks, like that of the Union, to the maintenance of conditions in which the native will not be able to invade the European field of employment,³ circumstances have not yet called for any legislative intervention in support of this principle. The poor white problem, which has been responsible for much of the action taken in South Africa for the support of the 'civilized labour' policy, has not assumed prominence in Southern Rhodesia; indeed, it is the avowed policy of the government to forestall its

¹ International Labour Office, *Industrial and Labour Information*, vol. lvii, 1936, p. 273.

² For the partial withdrawal of this restriction see above, p. 652.

³ See the Hon. G. M. Huggins, 'Southern Rhodesia' in *Eastern Africa To-day and To-morrow* (ed. F. S. Joelson), 1934, p. 349.

appearance; if, during the depression period, there was some poverty among Europeans, it was due only to temporary unemployment. No colour bar law has been passed, but agreements are made which mean that European labour is necessarily employed; an agreement of this type has, for instance, been made in connexion with the building trade. The Industrial Conciliation Act, 1934, contains a provision which enables the Minister to intervene if agreements seem likely to deprive natives of reasonable prospects of employment, but it is doubtful if this can be used to any effective purpose. Support is given to the employment of European labour in 'skilled' work by the terms of government contracts, and a convention excludes the use of natives on other than unskilled work on the railway.

The copperbelt mines of Northern Rhodesia afford the only example in British colonies of an organized industry which is in any way comparable with that of the Union, but the relation of European to native labour has not been subject to the influence of any such political or social theory as has produced the 'civilized labour' policy in South Africa. A considerable part of the white population engaged in industry is not permanently resident in the colony, and in the population as a whole the European stands only in a proportion of 1 to 120 natives. There has, as yet, been no problem of poverty among the Europeans comparable to that of the poor whites in South Africa; during the depression period it was necessary to deal with a number of destitute Europeans, 409 being repatriated in 1932 and 173 in 1933, but the numbers so treated fell to twenty-five in 1935. On the railway a strict colour bar prevails owing to Trade Union influence from Southern Rhodesia. The European workers in the mines are organized in a Union but, while an established convention regulates the respective fields of white and native work, it has not been embodied in any rule, nor has there been legislation of the type of the colour bar law. In 1935 the ratio of European to native labour at three of the principal copper mines was roughly 1 to 8, or approximately the same as in the Rand mines. No need has yet been felt for the passing of an Industrial Conciliation Act such as that of Southern Rhodesia. The scale of native pay in the mines reflects the fact that there is no difficulty in obtaining an adequate supply of indigenous

labour without recourse to recruiting; the 18,464 natives employed on an average each month in 1935 received an average wage of 23s. 6d. a month with food, the rate in the farming areas being 5s. to 10s. a month with food. It may be noted that though native wages are low, this would not seem to have been an important factor in causing the copperbelt disturbance of May 1935.¹

In none of the other British colonies is there a resident white population of a type which creates a problem in industrial employment, and there is accordingly no evidence of state intervention to maintain a 'civilized' scale of wages confined to Europeans, or to restrict the entry of natives or Asiatics into a field of employment held on social grounds to be reserved for white labour. Thus, to take a typical point, government policy in Tanganyika and Nigeria has led to the growing use of trained natives as engine drivers or stationmasters, and in the postal and telegraphic services. Nor again is any such policy apparent in the French territories; the current system of technical instruction seems designed to fit natives for any industrial employment of which they show themselves capable, and this is a marked feature of Belgian policy. The education given to the families of native workmen in the Katanga copper mines is preliminary to a system of apprenticeship designed to produce workmen capable of handling technical processes. The considerable reduction in the number of European employees in the *Union Minière* mines, which fell from 1,951 in the year 1930 to 591 in 1934, was mainly due to trade conditions, but with the revival of production every effort is being made to obviate the re-engagement of Europeans, by substituting native skilled labour. Natives operate almost entirely the electrical overhead trollies and haulage of trucks in the mines, and are employed as engine drivers and on other skilled work on the Congo railways.

IX. GENERAL CONCLUSIONS

In the remarks with which this chapter opened, the deficiency in the supply of labour was shown to have had a dominating influence over the earlier policy of the administrations in dealing

¹ *Report of the Commission on the Disturbances in the Copperbelt, Northern Rhodesia*, Cmd. 5009, 1935, pp. 85, 144.

with labour questions. In present circumstances, however, the problem has become one of local rather than of general importance. In the Union the increased activity of the Rand mines, involving the employment of a force of more than 300,000 men, creates a demand which can only be met by the use of an extensive organization for recruiting,¹ more than 48 per cent. of the supply being drawn from outside the Union. Complaints of the shortage of labour on the farms of the Transvaal and parts of Natal constantly recur in debates in the Union Parliament and continue to influence the attitude of the agricultural interests in regard to native policy. Recent developments in some territories have shown that a large expansion of industrial activities may result in a shortage, but this resembles more closely the shortage experienced by older industrialized countries in periods of trade revival than that which formerly arose in Africa from the natives' unwillingness to enter wage employment. The report of the recent committee in Tanganyika considers that with the elimination of waste there is ample man-power for the needs of the territory, both for wage-earning and in the growing of economic crops.² It should be noted that in the Rhodesias and in East Africa wages have not yet been raised much above the low level to which they were reduced during the economic depression. In the British West African colonies employers can now find sufficient labour without recourse to recruiting agencies. The most significant evidence of the change which has taken place lies in the growing substitution of short for long-term contracts; the short contract is now common in both Northern and Southern Rhodesia, and in the West African colonies the labour contract has almost ceased to exist. In the Belgian Congo, on the other hand, though the question of supply no longer causes the same difficulty as formerly, it still presents features which occupy the serious attention of the administration;³ in the French colonies it constitutes a difficulty only where new schemes of development, such as that of the Niger⁴ basin, necessitate the importation of settlers into a sparsely populated area.

All the evidence shows that the normal economic incentive to

¹ See above, pp. 651 ff.

² *Report of the Committee Appointed to consider and advise on Questions Relating to the Supply and Welfare of Native Labour in Tanganyika Territory*, 1938, p. 11.

³ See above, pp. 647 ff.

⁴ See Chap. XV, p. 1049.

wage-earning is an influence of increasing strength; and it therefore becomes interesting to examine the conditions which seem to regulate the stimulus which it affords. In the circumstances of Africa the availability of labour for industrial or agricultural enterprise may be held to be determined by the presence at a convenient distance either of a population engaged in a purely subsistence economy or, alternatively, of one which is engaged in the production of crops for sale, but is of such density that a proportion remains without profitable employment. In the former case also the density of population is a factor of some importance; a nomadic pastoral people is, as experience shows, less ready to respond to the stimulus of wage-earning than one engaged in cultivation. The Masai and Zulu seem characteristically opposed to entering into employment; the attitude of the Masai to cattle as the most prized of all commodities has rendered them impervious to the attraction of European goods, while their herds provide them with an alternative source from which to meet their cash obligations; the tradition of the Zulus as a dominant warrior race makes them reluctant to accept the discipline of industrial labour, though they are not disinclined to enter domestic service. But facts do not support the popular belief that the 'collectivist' organization of African society implies the absence of those individual ambitions in the material sphere which are regarded as the mainspring of European economic development. Nor is there any substance in the belief that improvement in living conditions will reduce the supply of labour from areas under a subsistence economy; indeed, any improvement in standards of living is likely to increase the supply of labour from such areas, and better subsistence will enhance the physical capacity of the labourer. On the other hand, the extension of marketable production will, in its initial stages at all events, undoubtedly reduce the desire for entry into employment or, alternatively, create conditions in which the employer can only attract labour by offering a considerably enhanced wage. Given, for instance, the existing density of population in the cotton producing areas of Uganda or Tanganyika, or in the cocoa areas of the Gold Coast, it may be anticipated that industrial enterprise would have some difficulty in securing labourers from them, but there are, on the other hand, many areas where a population engaged in

marketing production is so congested that a surplus would seem to be available for industrial employ. The possible effect of the extension of marketing cultivation appears, therefore, to depend largely on local factors.

It is significant that the Tanganyika Committee recommend that wage-fixing machinery should be established. The Geneva Convention of 1928, concerning the creation of minimum wage-fixing machinery, has been ratified by Great Britain, France, and the Union of South Africa. Ordinances to empower the Governor to make rules or appoint wage-control bodies have been introduced in Kenya¹ and Uganda,² but action has not been taken on them. Legislation on this subject has not been introduced in the French colonies except that a minimum wage is laid down annually for labour in French Togo.³ In the Belgian Congo the provincial commissions for the supervision of labour conditions appointed under the ordinance of February 13, 1934, are required to deal with the question of wages. The Portuguese territories do not appear to have passed minimum wages legislation, but the native protection commissions in Moçambique are in principle charged with the supervision of wages. Governments seem to have concerned themselves in the initial stages with questions of general treatment rather than of wages, but it is not unreasonable to suppose that with improving standards of living, and with the growth of industrialization, action in this direction may become necessary.

Experience seems to justify another observation. The inducement offered by wage-earning must be viewed not merely in terms of wages but in relation to conditions of employment. In Europe the general conditions of unskilled labour are such that a difference of wage is likely, within certain limits, to be a decisive factor in attracting labour; in Africa other circumstances, such as the treatment given, the nature of the task, or the amount of liberty left to the worker, have an equal or, in some cases, even a greater importance. It is, for instance, generally accepted that the scale of diet and housing provided on the Rand mines gives employment there a definite attraction; nevertheless, farm labour, with its com-

¹ Ordinance 22 of 1932.

² Ordinance 3 of 1934.

³ *Rapport annuel du Togo, 1937.*

paratively low pay and inferior scale of diet has, owing to the privileges of grazing and cultivation offered, advantages which for many classes outweigh those of mine or urban labour. On the whole, therefore, no general forecast can be made of the extent to which wages may have to be improved in order to produce the labour necessary to meet future development; the problem must be viewed in each case in relation to the circumstances of the area from which labour is sought and the conditions of employment offered by the industry. There is another consideration of no little importance in this connexion. In the initial stages of industrial enterprise the question of labour supply was considered mainly in terms of numbers; though labourers from different areas may have given evidence of different mental and physical capacity, all were at the outset equally inexperienced in the type of work required. The traditional view of the African labourer as crude man-power, which could be suitably remunerated by a low and undifferentiated scale of pay, continued for long to influence employers, and it is only of recent years that they have recognized that an improvement in the efficiency of labour offers a possibility of effecting a reduction in the numbers required, and has an important bearing on the costs of production. The Tanganyika Committee of 1936-7, in advocating that the improvement of labour should take a prominent place in the programme of employers, suggests the increased use of machinery and the elimination of manual work as far as possible.¹ In the Union, social policy, overriding considerations of a purely economic nature, still confines the native to the field of unskilled employment, and this fact must reduce the stimulus which normally operates to make unskilled labour seek to improve its own capacity. The Union policy in regard to the land has also had an important influence on the quality of farm labour; the prohibition of renting land to a native on a cash or produce basis tends to deprive his labour of educative value in so far that it deprives him of interest in its output. Policy in the British Crown colonies takes a different direction. Technical education is being extended, and there is a growing use of the native in 'skilled' and technical work. This is even more marked in the Belgian Congo,² where

¹ *Report*, op. cit., 1938, p. 11.

² See above, p. 692.

industrial policy would seem designed to effect the substitution, wherever possible, of trained African labour for the European workman.

In the improvement of the efficiency of labour there is another factor of importance. Experience has shown that efficiency is closely linked with health conditions, and the more important organizations have now adopted, with satisfactory results, the practice of giving a period of 'acclimatization' by medical treatment and dieting before the recruit begins active work. This has been rendered compulsory in certain industries in the Belgian Congo. Reference has already been made to the study given to the question of dieting and health conditions in the Rand mines, the Northern Rhodesia copper-mines, and the major Belgian enterprises; but there are many instances where this consideration has been neglected by employers and has received inadequate attention from the state. The Tanganyika Committee emphasizes the wastage of labour due to ill health and the need for increased attention to dieting and health in the industries in that country.¹ The problem has, however, wider implications for, as has been recognized in the study made by the Belgian Labour Commissions, the solution lies not merely in attention to the health conditions of employed labour, but in intensive medical work and the promotion of improved standards of subsistence cultivation in the areas from which labour is drawn. In South Africa, the Director of Public Health drew attention in 1934 to the relation between the poor health standards of the natives and labour deficiency; the prevalence of diseases due to malnutrition is reflected in the high proportion of men who are rejected on medical grounds for work in the mines, a factor that partly accounts for the Union's partial dependence on immigrant labour. Of a group of 500 applicants specially examined in Bechuanaland in 1933, no less than 41·4 per cent. were rejected and 8·6 per cent. considered doubtful by the medical officers of the Native Recruiting Corporation. Again, the increased use of machinery could undoubtedly improve the value of the existing labour supply by using it more economically.²

¹ *Report*, p. 28.

² *Report of the Committee Appointed to consider and Advise on the Supply and Welfare of Native Labour in the Tanganyika Territory*, 1938, p. 11.

The problems of labour, however, cannot be considered only in the light of the need experienced by employers for a larger and more efficient supply of workers. The state has its own social duty to perform in improving the conditions of employment. It has been shown that natives are to a great extent debarred from forming unions to protect their interests, and legislation makes it an offence for contract natives to strike or to withhold their services without giving notice of the termination of their contracts. It may be questioned whether African workers are in general sufficiently advanced in capacity for organization to form effective trade unions, or whether, in territories where the state has assumed a full responsibility for their working conditions, such unions can serve any useful purpose. Experience has shown, however, that some collective means for the ventilation of grievances which may otherwise remain unknown to the authorities until disorders break out, is desirable. Political or social policy may operate in South Africa to prevent the entry of the native into skilled employment or may limit the interest which he can acquire in the land, but there is nothing in that policy which should prevent state intervention for the benefit of the native in such matters as the improvement of the housing conditions in urban areas or the regulation of the scale of pay given to farm workers. There are, again, some features of the pass laws¹ and of the Masters and Servants Acts, or of the administration of the recruiting system, which urgently require improvement. In the British colonies there is a need for the more systematic regulation of welfare conditions and their safeguarding by the provision of an inspectorate.² In the Belgian Congo there appears to be some evidence of the continuance, despite official condemnation, of the system which permits administrative officers to interest themselves in recruiting for private employers; and the allegations made with regard to recruiting operations in Portuguese territories have been mentioned. These are typical instances, but they are matters which lie within the normal sphere of administrative obligation, and with the advance in standards of good government it is reasonable to hope that they will receive the attention which they demand.

¹ See above, pp. 664 ff.

² See above, p. 677.

The disintegration of social life is an almost inevitable result of the contact of primitive peoples with European civilization, and every consideration dictates the need for avoiding the undue disturbance of their existing social equilibrium if we are to be able to assist them to adjust themselves in a healthy manner to the new social and economic systems thrust upon them. In studying this question we must, however, distinguish those results which can be directly attributed to the introduction of capitalist enterprise from those which must in any case have followed from the impact of European civilization on the more primitive conditions of Africa. The latter falls within the field of sociological inquiry proper; here we must limit ourselves to a study of the most characteristic results which have followed directly from the introduction of capitalist enterprise—namely, the depopulation of certain areas or the deterioration of local subsistence conditions owing to the migration of labour, the social evils due to the removal from their families of large numbers of adult males, and the difficult situations created by the aggregation of industrial populations divorced from the traditional controls of tribal life.

The periodic migration of labour occurs in nearly every African territory, though its results are not equally felt. There is a migration of agricultural labour even in those areas where native production has formed the chief line of development; labour moves, for instance, into the southern areas of the Gold Coast and the Cameroons, or, again, into Uganda or the districts of Tanganyika bordering on Lake Victoria. The movement to the farms and plantations in East Africa is of importance; it is, however, of a particular character; the place of employment is often in the vicinity of the native areas from which labour is drawn, and the labourer remains in contact with his own people; in any case, agricultural occupations seldom involve so complete a change of environment as employment in industry. It is the employment in the mines, and especially in those which draw their labour from a distance and secure it under contracts involving a considerable period of absence, which accounts for that form of migration which has the most significant effects. In estimating the extent of migration of this type it is necessary to rely for the most part on the official figures showing the proportion of 'foreign' labour employed

in each country; it must be noted, however, that migration which takes place across a political frontier does not necessarily mean that the journey is longer than many that are made by natives in search of work within the boundaries of a single territory. There are cases—as, for instance, the Lupa gold-fields—where employment centres are more accessible to populations across the frontier than to residents under the same administration.

The most conspicuous migration is to the Union, which, as has been shown, is largely dependent on 'foreign' labour; the mines in 1936 drew 183,851 of their native employees from sources within the Union, 49,582 from Basutoland, 7,521 from Bechuanaland, 7,316 from Swaziland, 89,104 from Portuguese territory, and 3,833 from other territories. In spite, however, of the large numbers drawn from outside, the effect of the industrial demand on the population of the Union itself is more marked than in any other territory. The tax returns for a number of areas in 1928 and 1929 showed that over 60 per cent. of the taxpayers were absent;¹ a Transkei magistrate stated in 1931 that 10 per cent. of the total population of his district was permanently absent at work; in the Herschel district it was estimated, as the result of an investigation made in 1930, that 75 per cent. of all adult males were away six months every year.² The effect is also strongly marked in the High Commission Territories. In Basutoland the average proportion of adult males absent has been calculated at 50 per cent.; in one district of Swaziland 8 per cent. of the taxpayers are stated to have been absent more than four years.³ A study made of the Bakxatla tribe of Bechuanaland placed the proportion of adult males employed outside the territory at 40 per cent., and of these 5 per cent. were not expected to return.⁴ Though the material available is admittedly inconclusive, it has been estimated that the annual labour exodus from Swaziland affects some 10,000 out of an adult population of 26,000, from Bechuanaland some 7,000 out of one of roughly 40,000, and from Basutoland some 60,000 out of one

¹ *Report of the Native Economic Commission*, 1930-2, p. 173.

² W. M. Macmillan, *Complex South Africa*, 1930, p. 178.

³ *Report on the Financial and Economic Situation of Swaziland*, Cmd. 4114, 1934, para. 25.

⁴ I. Schapera, 'Labour Migration from a Bechuanaland Native Reserve', *Journal of the African Society*, vol. xxxiii, 1934, p. 49.

of 120,000,¹ and though no calculation is possible of the average time for which they are absent, it is clear that those engaged in the mines are not absent for less than a year, the average period of actual service being eleven months.

Southern Rhodesia is, as has been shown, largely dependent on immigrant labour; the mines in 1936 employed 60,397 natives from outside the territory as against 23,659 from inside, and other employments absorbed 73,361 foreign labourers against 63,993 local. The exodus from the local native reserves is far less general than in South Africa, though it was noticeable in particular areas before the depression. It was estimated in Ndanga District in 1929 that fully 80 per cent. of the able-bodied men were absent for an average period of nine months in the year, but this, if correct, would seem to be an exceptional case. Northern Rhodesia is an exporter of labour; 53,462 natives were estimated in 1936 to be employed inside the territory and 51,212 outside.² The fact that labour in the copperbelt has become to a certain extent stabilized has only reduced in a minor degree the movement of labour within the territory; it is very marked in certain areas; in the Eastern Province some 15,600 out of a taxable population of fewer than 50,000 were estimated to be away at work at any one time. An increasing tendency for boys under 18 to leave home has been noticed.

The migration of labour has for many years formed the dominant problem of Nyasaland, and the recent inquiry of the local committee on emigrant labour provides fuller material regarding its effect on the population than is available elsewhere. Though until recently the recruiting of labour from the Protectorate was prohibited, and it is still illegal to cross its boundaries without a pass, these measures have been ineffective, and there is an exodus of significant proportions. In 1935 it was estimated that out of a total male population of 750,000 some 120,000 were in employment abroad; 75,000 were working in Southern Rhodesia, of whom 24,300 were at the mines, and the total believed to be employed in Tanganyika was about 20,000, of whom 15,000 were at the gold-mines. In 1934 the estimated percentage of taxpayers absent from Mzimba District was 65; from West Nyasa, 60; from

¹ International Labour Conference, *The Recruiting of Labour in Colonies*, 1935, p. 36.

² See above, p. 606.

North Nyasa, probably 50; and it was believed that as many as 25 to 30 per cent. were unlikely to return to their homes. In Tanganyika the labour in the gold-fields is, as has been shown, largely immigrant, but much of that employed on the plantations is drawn from long distances within the territory and is absent for considerable periods. In Kenya there is little migration of the type characteristic of areas farther south, but there is a considerable exodus from certain of the reserves for local employment on the coffee and sisal estates. It was estimated in 1933 that the Kikuyu of Kyambu district sent an average of 62 per cent. of their able-bodied male population, the Nandi 74 per cent., the Lumbwa of Kericho 43 per cent., and the North Kavirondo 38 per cent. to work for various periods on farms and plantations. In Uganda the movement of labour is for the most part confined to seasonal employment in the cotton fields. In the British West African colonies the movement is also mainly seasonal and for agricultural purposes; from the Northern Territories of the Gold Coast, however, there may be said to be migration of the type familiar elsewhere, and it is noteworthy that though much of the labour goes to the gold-mines on short-term agreements, the period of absence probably averages about a year. There is also a fair amount of migration from French territory to plantations in the Gold Coast Colony and the British Cameroons.

In the Belgian Congo the number of natives required in European undertakings rose from 45,702 in 1916 to 409,665 in 1930; this created at one time a serious problem of migration, and was one of the main reasons which led the Belgian Government to appoint the Labour Commission to which reference has already been made.¹ The period of depression led to a marked decrease in the demand for labour, and the situation in regard to migration has been further eased by the adoption of the policy of 'stabilization'.² The Katanga copper mines at one time drew more than half their labour from the Bemba of Northern Rhodesia, but have now almost ceased to recruit from this source, and it was announced in 1932 that they had also ceased recruiting in Ruanda-Urundi, though they still seem to employ a certain number of men from

¹ See above, p. 647.

² See Chap. IX, pp. 523 ff..

that area.¹ The Kilo-Moto and some other gold mines recruit from the Congo, but in some cases from areas at considerable distances from the mines; here, also, some measure of stabilization has been adopted. Though, however, the problem of migration is no longer of the same magnitude, it is clear that with any improvement in markets it may again present difficulties. In the French territories the distribution of the population in relation to the demand for labour has been responsible for a certain measure of migration; thus in French West Africa the greatest density lies in the region of the Upper Volta, whereas the requirements for labour have mostly been in the plantations of the Ivory Coast; in Equatorial Africa the forest concessions in the Gabon have made a demand which the sparse population, averaging not more than 1·4 per square kilometre, has been unable to supply. In 1929 the total number of workers employed on forestry undertakings in the Gabon was 25,000, of whom 17,000 came from inland districts; the numbers employed have, however, since been greatly reduced. The experiment of transplanting whole native villages to the Gabon does not appear to have met with success. The extent of the annual migration from Portuguese territories is given by the figures of recruitment for South Africa and Southern Rhodesia, to which reference has already been made;² it clearly constitutes a heavy drain on the man-power of the areas from which it is drawn.

It would, therefore, appear that the most conspicuous effects of labour emigration will be found in South Africa, the High Commission Territories, Northern Rhodesia, and Nyasaland; Kenya has a problem, but of a more local nature. No demographic study has been made in these territories which shows the actual result of emigration on the vital statistics of the population affected. It is probably true that there are areas in which the normal increase of the population has been affected; there must indeed have been cases of decrease, but definite figures are lacking to support this assumption. It may again be reasonably assumed that in many cases the absence of adult workers has resulted in a reduction in the cultivation of subsistence crops, and though no agricultural

¹ League of Nations Permanent Mandates Commission, *Minutes of the Twenty-Second Session*, p. 248.

² See above, pp. 700-1.

statistics can be quoted in proof of this it has been stated as a fact by more than one observer. Thus the Chief Native Commissioner of Southern Rhodesia reported in 1926 that in reserves admittedly overcrowded three-quarters of the cultivable land was untilled for want of man-power, and the report¹ of the Native Economic Commission contains statements to the same effect. It has been suggested, on the other hand, by Dr. J. F. W. Grosskopf,² that this effect of labour emigration can be over-emphasized, since the bulk of agricultural work is in any case carried on by women; but this view seems to overlook the fact that in every native community the male has specific tasks which cannot be delegated to women. These are particularly important in areas where the practice of shifting cultivation prevails, and large trees have to be cut down before fallow ground can be planted. In South Africa particularly the growing substitution of the hoe by the plough has also increased the importance of the male worker in cultivation. The loss in production might be balanced by the gain to the community from the wages earned by absentees if an adequate proportion of the latter were brought home, but, as was shown in Nyasaland,³ this is not always the case. As Professor S. H. Frankel⁴ has noted, the prevailing low wage rates do not enable the migrant workers to accumulate sufficient capital to permit a reorganization of the basic economic activities in the village that would compensate for the men's absence. Of the social effects of emigration it is possible to speak more definitely. The Commission on Closer Union in East Africa⁵ was impressed with the gravity of the situation that would arise if the absence of natives from the reserves were such as to interfere with the continuance of native family and tribal life. A comprehensive study of this question is still lacking, but the report of the Nyasaland Committee on Emigrant Labour, 1936, contains authoritative evidence of the effect of emigration from Nyasaland on the dislocation of family life, the general relaxation of the moral code, and

¹ Op. cit., p. 213.

² 'Vestiging en Trek Van die Suid-Afrikaanse Naturelle-Bevolking onder Nuwere Ekonomiese Voorwaardes.' *The South African Journal of Economics*, vol. i, 1933, p. 273.

³ *Report of the Committee on Emigrant Labour*, op. cit., para. 61.

⁴ 'Africa in the Remaking', *Our Changing World-View*, 1932, p. 153.

⁵ *Report*, Cmd. 3234, 1929, p. 67.

the disregard of the traditional sanctions which regulate behaviour.

In the French areas the chief effects of labour emigration will be found in the Upper Volta area of French West Africa and in certain parts of Equatorial Africa; the scheme of settlement involved by the development of the Niger basin¹ has not yet caused any large displacement of populations. Though, as will be shown,² the French Government has recognized the need for measures to prevent the effects of over-recruitment from particular areas, no demographic study appears to have been made of its effects on the population. Belgium, on the other hand, made a notable contribution to the subject in the proceedings of the Belgian Labour Commission of 1925 and 1928 and the inquiries held in 1930 and 1931. The situation with which these inquiries dealt was largely the outcome of somewhat unusual conditions; the construction of railways and roads had involved the use of compulsion on a considerable scale, and industrial expansion had created a sudden demand for labour in sparsely populated areas, with the result that large bodies of men, often recruited by the aid of official pressure, were transported long distances from their homes. The consequences, both in the 'depopulation' of certain areas and the reduction in production of local food supplies, were obvious.³ The commission pointed to the grave danger of a lower birth-rate and increased death-rate, which would destroy the social equilibrium of the communities concerned. It also called attention to consequences which were likely to occur even under more normal conditions, in the general demoralization of family life and, in particular, the spread of venereal diseases, and the probability that young women unable to marry at home would be lured to industrial centres by the gains of prostitution.

If some of the consequences of labour emigration still await the scientific analysis which only a comprehensive inquiry can provide, the general results are sufficiently recognizable to demand consideration of the extent to which they are preventable. Two lines of policy suggest themselves. It may, in the first place, be

¹ See Chap. XV, p. 1049.

² See below, p. 708.

³ See P. Ryckmans, *Le problème de la main-d'œuvre au Congo belge, province du Congo-Kasai*, 1931, pp. 54 ff.

asked whether the circumstances of Africa do not justify a deliberate choice between the fostering of native production and the extension of industrial and capitalistic enterprise. A question so general, however, cannot be discussed with the hope of arriving at any definite conclusion. It would be difficult to find agreement as to the weight to be attached to the factors, economic on the one side and social on the other, which seem to be involved; the views entertained would be coloured by judgements of the value of native institutions as diverse as those which are, for instance, current in Nigeria and the Union of South Africa. Moreover, the two lines of development are not necessarily antagonistic; they may often be complementary, and it is only in certain special conditions that they may come into conflict. While, therefore, a general discussion of this nature may be of some interest, in particular as serving to point to the need for the co-ordination of administrative and economic policy, a matter to which some governments have hitherto paid inadequate attention, the decision must in each case depend on local circumstances rather than on general principles.

More importance attaches to the results of the policy which accepts as inevitable many of the implications of the demand for industrial labour, but seeks to mitigate its consequences by regulating the extent of recruitment from particular areas and by improving the general conditions of life in the localities from which it is carried out. Equal interest has not, however, always attached to both aspects of this policy; though, for example, the improvement in the conditions of the reserves or other areas from which native labour comes is an accepted principle of British policy which has received increasing recognition in practice, little consideration has been paid to the question of the restriction of emigration from the areas most seriously affected. It is natural that such measures should not be envisaged as part of the Union system; the fact must now be accepted that the majority of the native population has become dependent on wage-earning, and, as the International Labour Conference of 1935¹ recognized, it is impracticable to introduce restrictive measures where the employment as wage-earners of a high proportion of the population has become an indispensable feature of the economic organization. The current

¹ *Report*, op. cit., part ii.

political philosophy of the Union appears to regard the movement of labour to and from the industrial centres as a civilizing influence which need not cause any material dislocation of native customary life.¹ The reserves constitute in this theory a reservoir of man-power of which the fullest use must be made in the interests of industrial development, but it is proper to add that an increasing recognition has of recent years been given to the necessity of improving the material condition of their residents.² The official attitude in regard to emigration from the High Commission Territories has been substantially the same as that in the Union. In Southern Rhodesia and Kenya attention has concentrated mainly on the improvement of conditions in the reserves, and there has been no systematic attempt to regulate the extent of recruiting.

The situation in Nyasaland, as already explained, presents a problem of peculiar difficulty; the consequences of emigration are recognized, but the prohibition of recruiting for employment outside the territory has failed to prevent a voluntary exodus of unusual proportions. The measures for the stricter control of emigration recommended by the Nyasaland Committee on Emigrant Labour³ would require the co-operation of other administrations which now benefit by the emigration; even if they so far subordinated their own interests, the agencies at their command are hardly adequate to make control effective. Some measure of co-operation has been obtained through the agreement with Northern and Southern Rhodesia, but the basic fact remains, that the economic condition of the Protectorate is such as to give labour a preference for external employment, and the only effective solution must lie in an internal development which will provide an equivalent source of employment within the Protectorate. Tanganyika has taken steps to limit recruiting in certain districts by orders issued in 1929, 1930, and 1931, and administrative orders restrict the making of contracts during the planting season. It is noteworthy also that certain districts have been closed to the grant of concessions for plantations, though this is an outcome of land rather than of labour policy.

¹ General J. C. Smuts, *Africa and Some World Problems*, 1930, p. 99.

² See above, p. 608.

³ *Report*, op. cit., part ii.

The French Government, in its general instructions issued in 1931 concerning public works financed from the Colonial Development Loan sanctioned in that year, called attention to the necessity for taking account of the 'demographic protection' of the communities from which workers were to be drawn. They indicated that the proportions taken for public works should not, in principle, exceed 50 per cent. of able-bodied males, but while they recognized the necessity for leaving a supply of labour for private employ they did not attempt to regulate the extent of migration.¹ Neither these directions nor the local regulations in force in French West Africa, such as those of 1926, referred to on page 644, fix a definite limit to the numbers who may be employed. Emigration has not, however, presented a problem of importance in French West Africa; it has created greater difficulty in French Equatorial Africa, where the extent of recruitment was regulated by a series of *arrêtés* commencing with that of February 18, 1921, referring primarily to recruitment of labour for the Gabon forest concessions. They originally fixed the proportion of men who might be engaged in the colony at one-third of the total male population, but this general direction clearly had no practical value, and in 1929 the principle was adopted of limiting the number of recruited workers to 4,000, the figure being progressively reduced in subsequent years. In the Portuguese colonies the Native Labour Code gives the Governor authority to prohibit temporarily the recruitment of labour from particular areas, but no information is available as to the extent to which this power is exercised. The Belgian Congo in following the recommendations of its Labour Commission has gone further in a considered policy of control than any other territory. The 'zoning' of districts available for industrial exploitation, the closing to recruitment of areas of low population or impaired health conditions, the fixing of a permissible percentage in each unit, and the progressive 'stabilization' of labour in the major industrial centres are parts of a comprehensive policy directed to obviating the mischief of excessive migration.

Though the details of the Belgian system may not be capable of

¹ Ministère des Colonies, Inspection Générale du Service de Santé, *Instructions relatives à l'établissement des prévisions d'emploi des crédits sanitaires supplémentaires des emprunts coloniaux*, 1931.

general application, its principles commend themselves as worthy of close study. It represents the first attempt to subject the movement of labour to systematic regulation in the interests of native society. Nevertheless, it does not provide as complete a remedy for the difficulties created by migration as has sometimes been supposed. In the first place, no restriction is placed on the number of natives who set out independently in search of work; the limitation applies only to those engaged by recruiting agents. In the second, it must be remembered that any limitation is likely to prove unenforceable in areas where the tax has to be provided by wage-earning. Even by following the logical course of accompanying the imposition of a quota by the remission of taxation, it is doubtful whether the spreading desire for European goods would not still tempt many natives to evade the restrictions. A complete solution of the problem, therefore, involves both a reduction of tax in depopulated regions and the provision of alternative sources of cash income, either through the encouragement of native production or the establishment of European plantations close to tribal areas. The latter is one of the courses advocated by the Nyasaland Emigrant Labour Committee. It must be remembered, however, that this can only be a satisfactory remedy if it does not involve the curtailment of the land available for native subsistence, and that it may result in the creation of vested interests which will later oppose the encouragement of independent native production.

There is a further range of problems still to be considered relating to the responsibility of the state for the provision of social services for the wage-earning class. The situation presents features essentially different from those of Europe. There the development of wage labour has generally involved the permanent concentration of the workers at the place of employment, and this has carried certain necessary consequences; the dependence of the worker on his wage as his sole source of income; a continuity of residence which means that the new centres grow into organized wholes; and the recognition that the growth of these urban populations imposes on the community certain responsibilities towards the wage labourer in the form of provision for social services and, most important of all, the maintenance of that section which is

deprived of employment by fluctuations in trade. In Africa the organization of wage labour has proceeded on the assumption that, except where farms are worked by squatter labour, the homes of the labourers will continue to be in the native areas, and that responsibility towards them will be discharged if they are remunerated at rates suitable to the single man and are adequately fed and housed in their temporary place of employment. Many of the social responsibilities which are undertaken by a modern European state could not, in any case, have a place in an industrial population consisting mainly of adult males.

It is clear that by treating the native reserves as reservoirs of man-power there is, in effect, a saving in that outlay on social services which in other circumstances might have to be incurred on behalf of industrialized labour, a fact which may be taken as reinforcing the claim for expenditure on the improvement of the reserves.¹ But even if that claim is satisfied there still remain certain social responsibilities towards labour in the industrialized centres which demand consideration. Such labour may for the present purpose be viewed in three classes. First, that which normally returns to its home on the conclusion of each period of contract service, and may, therefore, be regarded as only temporarily resident in an industrial centre. These workers are very rarely accompanied by their families; thus, in the Rand mines, which are an outstanding example of employment of this nature, there are only 1,518 native married quarters. Secondly, there are the workers employed in 'stabilized' centres, of whom a considerable number bring their families with them; the labour is housed by the management and lives under its control; it may continue in work for many years, but in the end it generally returns to its home on the termination of employment. Thirdly, there is the labour which, whether employed in secondary industries or in other urban occupations, with or without dependents, lives in 'locations' at or near the centre of employ, in which housing is neither provided nor controlled by the employer.

In regard to labour of the first two classes, expenditure on welfare conditions is the concern of the employer; the state has, however, the responsibility for the administration of justice in cases

¹ See above, p. 608.

arising between the employees, particularly in marital or similar matters. This question is discussed in Chapters VII and XX, and it will be seen that the problems which it raises are by no means simple. How far labour so employed becomes 'detribalized' is open to doubt; as has already been remarked,¹ the term itself is one of very variable interpretation. It will be realized that even in the 'stabilized' centres the workers do not necessarily become permanent residents of a self-contained community; they retain contact with the tribe and a majority pass back to it on the termination of their service. The question of the civil law to be made applicable to this class of labourers is one of peculiar difficulty; in the absence of a tribal court it is not easy to apply the worker's own customary law; to subject him to non-tribal or European law hastens the process of his 'detribalization'. There is another point of some importance in regard to the 'stabilized' centre. Purely temporary labour can, in the event of a reduction in numbers owing to trade fluctuations, be re-absorbed in the tribal 'reservoir', but in the event of unemployment in the 'stabilized' centres great hardship can result, as the experience of the copper-belt during the period of depression showed. The successful establishment of 'stabilized' conditions appears to imply some obligation for providing for the occurrence of periods of unemployment. The state has a larger range of responsibility in regard to labour of the third class, the permanent residents of the 'locations' and urban centres. Details have been given above² of the estimated strength of the population of this class and an indication of the social problems to which it gives rise; they are problems which in certain areas have clearly received inadequate consideration. The urban native location cannot in effect be regarded merely as a temporary prolongation of the reserve; it is increasingly obvious that it is an essential feature in conditions of industrial development. Industries depend on the existence of a supply of relatively low-priced native labour; the contribution which the workers make to industry, and through it to the financial prosperity of the country, carries an equivalent obligation for a recognition by the community of its social responsibilities towards them.

¹ See Chap. IX, p. 498.

² *Ibid.*, pp. 500 ff.

CHAPTER XII

THE STATE AND THE LAND

THERE is no matter in which colonial policy expresses itself so conspicuously as in the use which administrations make of their powers in regard to land, and certainly there is no question which has influenced more critically the attitude of Africans towards the governing power. 'On the manner in which this is conducted', Lord Durham said, 'all else depends.'¹ Up till now the public which interests itself in African affairs has concerned itself chiefly with the action of the colonial powers in assuming rights to alienate native lands or to control the use made of them by native right holders. In some measure this may now be regarded as a chapter in colonial history to which circumstances are tending to give a less important place than it once occupied, but it is not possible to appreciate the position to-day without examining the stages which have led up to it. It is proposed in the present section to deal with this aspect of the land question; a subsequent section will deal with other features which are now of growing importance to the administrations—namely, the changes taking place in traditional African tenures, the problems connected with the determination and record of title, the growth of transferable interests in land, and its use as security for credit and the like.

I. A COMPARISON OF COLONIAL LAND POLICIES

(a) *Introduction*

The study made in the present section must necessarily confine itself to the manner in which colonial powers have exercised their sovereignty; the methods by which this has been acquired, whether through conquest, treaty, or the less formal processes of tacit agreement, will come under discussion only in so far as they may bear on the rights now assumed by the states concerned. No

¹ *Lord Durham's Report on the Affairs of British North America*, edited by Sir C. P. Lucas, 1912, pp. 203, 242.

comparative study appears to have been made of the various ways in which European powers have treated the claims of native populations to rights over land in Africa and elsewhere, and here it is only possible to refer to certain typical cases. In all earlier colonial history, policy was determined primarily by the physical character and economic possibilities of the territory coming under control rather than by consideration of the rights which might be held by natives; areas held to be suitable for European settlement were everywhere liable to expropriation for that purpose, and those which, for climatic reasons, or because they were already fully occupied by native cultivators, were not so suitable, were liable to be subjected to various systems of control designed to place Europeans in a position to exploit their production. It was only at a later stage that the recognition of native rights became a question of policy, and even at this stage the acknowledgement of such rights seems to have owed much to economic considerations, such as the possible benefit to the colonial power of encouraging peasant production as compared with plantations or other forms of capitalist enterprise. Only in relatively recent times can native rights in land be said to have been considered on a purely legal basis.

It is of some interest to note the extent to which the treatment of land rights in Africa resembles that which has occurred elsewhere. The settlement of farms in South Africa had its parallel in the history of colonization in America; there the Crown at the outset assumed the right to give to settlers full proprietorship, and they proceeded to occupy lands without any consideration of Indian claims. After the initial period of forcible occupation, a rule of law gradually established itself in the British provinces of America by which, while the ultimate fee was in the Crown and its grantees, Indians were protected in the possession of such lands as had been left to them or reserved for them, though the Crown still retained to itself the right of transfer or removal.¹ In Canada the Crown at an early date assumed the right to reserve certain areas exclusively to Indians in territories acquired by treaties of cession. The Privy Council, in 1888, held that under the Proclamation of

¹ M. F. Lindley, *The Acquisition and Government of Backward Territory in International Law*, 1926, p. 339.

1768 the tenure of the Indians was a 'personal and usufructuary right dependent on the goodwill of the sovereign'. New Zealand presents a case in which the general policy of occupation for European settlement had to yield to organized native opposition; the British encountered recognized sovereignties with which to treat, and the Treaty of Waitangi in 1840 guaranteed to chiefs and tribes the full, exclusive, and undisturbed possession of the lands left in their occupation, subject to the Crown's exclusive right of pre-emption. The history of land policy in Fiji presents features of another type, to which some parallel exists in West Africa; the cession instrument of 1874 vested the proprietorship of all lands in the Crown, except such as had already become the bona fide property of Europeans or were in the use or occupation of some tribe or required for its future support. The Land Commission of 1883, however, reported on inquiry that the whole of the land in Fiji was in fact owned by the various tribes.

The land history of British India is of interest, for though it has no precise parallel in Africa, it throws light on some of the problems which are now beginning to emerge there. The pre-Moslem tradition claimed the ownership of land for the state, but in practice this meant only the right of the state to take a share of the produce. This system was dictated by economic circumstances, for where there is a large and stable population on the land, control tends inevitably to take this form rather than that of a claim to the land itself. This is a rule of general application; its operation will be seen in a comparison of the different measures adopted in the well-populated lands of West Africa and the more thinly occupied regions of the south and east. The Moguls made the principle of state ownership the basis of a fully developed system of land taxation, and under their rule there arose a generally recognized right of individual occupation which had most of the aspects of freehold, since it was limited only by the ultimate right of the state (or its fief holders) to dispossess those who did not pay the charges assessed on the land.¹ The British, having little interest as colonists, concerned themselves mainly with the revenue from the land, and made no claim to exercise rights of disposal over any areas on which individual rights could be shown to

¹ W. H. Moreland, *The Agrarian System of Moslem India*, 1929.

exist; 'state' lands are to-day only those which, like the large forest areas, were recognized in pre-British times as reserved for state or administrative purposes, or those which, in the elaborate process of survey conducted under British rule, have been shown to carry no private rights, or, finally, those acquired by purchase for public uses. In British India, out of a total area of 564,135,025 acres only 158,956,761 acres are now recorded as owned by the state. The comparatively small areas alienated by the state to non-natives for tea or coffee plantations or the like have formed part of the lands recognized from the first as forest or other state property.

The British India Government has not used its powers to enforce any system of compulsory cultivation such as that of the 'cultuurstelsel' of the Dutch East Indies, to which reference will presently be made. With the extension of systems of survey and registration of title practically the whole of the land in India is now held in individual title, and it is of interest to note the results as shown by the analysis of the agricultural population contained in the census figures of 1931. There were 3,257,391 non-cultivating owners, 27,006,100 cultivating owners, 34,173,904 cultivating tenants, and 31,480,219 persons recorded as agricultural labourers. Circumstances have not arisen which have made it necessary to pass legislation restricting the power of alienation by natives to non-natives. Private acquisitions by the latter have been small and were never on a scale sufficient to cause social disturbance; the only case which has attracted attention has been the private acquisition by Europeans of estates in Bihar for the growing of indigo. In a large part of India mineral rights follow surface rights and remain with the native holders of the land; in the more newly acquired provinces the state has utilized its position as 'ultimate owner' to claim the mineral rights for itself. The land problems of India to-day arise from the necessity of legislative intervention to adjust the relations of Indian landlords and tenants, or to correct the effects which an unrestricted power of obtaining credit based on land is producing in the social and agricultural economy.¹ These are problems of a type with which some African administrations may also become familiar in the near future.

¹ See below, p. 872.

There is also much in the treatment of land rights in the Dutch East Indies which is of interest in considering the land history of Africa. The Dutch East India Company proceeded on the assumption that the state is the ultimate owner or over-proprietor of the land, but this did not in practice operate as a restriction on private ownership otherwise than to necessitate compliance with certain formalities in land transactions. The principle of over-proprietorship, however, formed the legal basis of the so-called 'cultuurstelsel' which for many years distinguished the economic system of the Dutch East Indies, and the history of which is of interest in view of the use of the practice of 'compulsory cultivation' in different territories in Africa.¹ The system, designed to secure the production of export crops, was introduced in 1830.² Each village was obliged to set aside one-fifth of its lands for production for the European markets, under the direction of the native chiefs, who were subject to the supervision of European officials. The success achieved in the cultivation of indigo and sugar was followed by the extension of the system to tea, coffee, tobacco, cotton, and other crops, and the original limit of one-fifth was in practice extended to include one-third, one-half, and sometimes the whole of the arable. At the outset land so set aside was free of rent, but subsequently land rents were also exacted from the peasants engaged in 'cultuurdienst'. The government made large profits from its exports, but rice production fell, and the continuous rise in the price of foodstuffs added to the hardships in which the system involved the cultivators. Liberal opinion in Holland moved against the system, and from 1854 onwards steps were progressively taken to terminate the 'cultuurstelsel' and to introduce free cultivation. Cultivation of sugar under government control terminated between 1870 and 1891, and that of coffee in 1917.

In the earlier stages of its history the Dutch East India Company did little to define the respective rights of the cultivator, the ruler, and the state, and in Java large estates were sold with seigneurial rights over the heads of the Indonesian occupants. After 1835 various decrees prohibited the cession of different types of land to Europeans without a preliminary investigation into native rights,

¹ See Chap. XI, pp. 608 ff.

² H. T. Colenbrander, *Koloniale Geschiedenis*, 1926, vol. iii, p. 33.

but the law defined 'native lands' as the area in actual use, and the degree of protection afforded by it was limited by the latitude of interpretation which it permitted. The Agricultural Act of 1870 was designed to effect a closer definition; it allowed government to lease out uncultivated and unoccupied lands for seventy-five years; all 'free' lands were held to belong to the state. The land required for European plantations was obtained, however, not only through state sale or lease, but also by acquisition from natives. *Adat* law does not recognize the right of alienating land to persons who are not members of the community that claims ownership, even if they are Indonesians. Nevertheless, large tracts were ceded to Europeans by the Princes in the States of Java for sugar and tobacco cultivation, and the leaseholders obtained at the same time the right to labour service from the native occupiers. Since 1912 the government has adopted the policy of buying back the seignorial estates, at great expense, and introducing fifty-year leases with annual compensation to the villagers.¹

The decree of 1870 gave Indonesian holders of rights over land the opportunity to obtain individual title. This step was considered premature, and a provision followed that made registration depend upon recognition by a judge of unencumbered individual right of possession. To operate the land tax it was decided in 1873 to introduce a register of property, the compilation of which, although it was confined to urban areas, provided experience which led in 1907 to the adoption for the whole of Java of the principle of utilizing the cadastre for land-tax assessment. The desire to register individual titles remained alive in some quarters, and between 1922 and 1924 more than 100,000 fields were surveyed, but the experiment was then discontinued on the ground of expense and because it was considered that individual tenure was alien to the native community, while the tax cadastre provided the Indonesian with all the security of tenure that he required.

✓ In the African territories state action in regard to land has followed three recognizable lines. There is, first, the group of states which have been influenced in their policy by the demand for land for European colonists or for mining interests; secondly, the group which has sought development mainly through the agency

¹ A. D. A. de Kat Angelino, *Colonial Policy*, 1931, vol. ii, pp. 474, 476.

of the native cultivator; and, thirdly, the group which has endeavoured to develop the resources of the territory by giving to Europeans large-scale concessions of land or of monopolies for the collection or sale of produce. The first group comprises the Union, the Rhodesias, Kenya, and Nyasaland, and it will be convenient when dealing with it to include a reference to the High Commission Territories. The second group contains the remainder of the British territories; the third, the Belgian and French territories, though the concessionaire system has now practically ceased to operate, and can never be said to have been applied in French West Africa. The classification is, indeed, to be regarded as the best means of exhibiting certain practical tendencies rather than as an attempt at exact description.

(b) *South Africa*

In the early history of Cape Colony circumstances did not seem to call for any definition of the legal position in regard to native lands. At the outset, when only Hottentots and nomad Bushmen were encountered, the available areas were so large and signs of settlement so far wanting that, had the question arisen, the land would no doubt have been described, in the phraseology of international law then current, as *territorium nullius*. When, towards the end of the eighteenth century, the Boers advancing northwards first met the southward migration of the Bantu, neither side could justly claim to have any superior rights in land, to which indeed they were both new-comers. The question of right, however, was not one which occupied the government of the time; its first problem was to establish a frontier behind which it could contain its own difficult and unruly colonists, and thus avoid the military consequences which each forward thrust involved. As it was, each extension of the frontier could mean only the assumption by the colony of full rights over the newly occupied land, with an implied power of alienation where circumstances, political or otherwise, were held to require it. There was a time (1835-47) when the adoption of the Glenelg policy of separation might have obviated the need for making any legal definition of native land rights, for the system of treaties on which that policy was based would have left Bantu tribes in independent possession of their lands, reduced

in area no doubt, but under their own control. But the forward thrust of farmers, encountering in its turn a forward movement of Bantu, made this policy impracticable; annexation was a decision of necessity, not of choice, and though throughout it was recognized that difficulties would inevitably ensue from the closer contact of the two races, nevertheless continued pressure from colonists drove the Cape Government forward: lands were allotted to meet the needs of farmers, until with successive extensions of territory it was found that the Kaffirs were too numerous or too strongly settled to permit of fresh expropriations.

In British Kaffraria, now known as the Ciskei, the abandonment of the 'treaty' policy resulted in the confiscation of land from rebellious tribes and the interspersing of Europeans among the natives as both a military measure and a financial expedient;¹ in other parts of the country the native reserve system was adopted. The system may be traced to an early stage of the Cape history, at which some effort had been made to provide for dispossessed Hottentots in the small settlements established under missionary influence at Bethelsdorp and elsewhere.² At a later date certain locations in the Ciskei were recognized as native areas, in which Europeans could not purchase land; a more important step was taken when in 1864 it was decided to treat the Transkeian territories, with the exception of a few small outposts held by Europeans, as semi-independent states in which land was not available for Europeans, a position which was not modified by the annexations which took place in various stages between 1879 and 1894. The native reserve policy proper may be said to have originated in Natal, where Shepstone's influence with the Natal Native Commission of 1846-7 resulted in considerable areas being left with natives on terms which protected them from further reduction by alienation.* The Crown maintained that arrangement when Natal became a separate colony in 1856, and in 1864 it regularized the position by vesting the lands in a Native Trust.³ When Zululand was annexed in 1897, with a promise of the preservation of its lands, a Lands Commission was instructed

¹ W. M. Macmillan, *Bantu, Boer, and Briton*, 1929, pp. 129, 267, 299.

² W. M. Macmillan, *The Cape Colour Question*, 1927, pp. 148, 271.

³ Letters Patent, dated April 27, 1864.

to provide liberally for natives in view of both their present and future requirements. Though their recommendations were cut down, about three-fifths of Zululand was formed into reserves and placed under the Zululand Native Trust.

In the Transvaal native land requirements received from the first less consideration than elsewhere; under the Volksraad resolution of November 1853 commandants of the republic were instructed to grant land for occupation by natives conditional on good behaviour,¹ but, recognizing only the limits set by malaria and the tsetse fly, farmers are said to have settled regardless of the native population.² The terms of the Pretoria Convention of 1881, which recognized the independence of the Transvaal, stipulated for the appointment of a Standing Native Location Commission, whose main duty was to assign to natives such locations as they might be fairly or equitably entitled to. Its recommendations appear generally to have been acted upon by the Transvaal Government, but the work was not completed before the Boer War; after the war the Crown Colony Government appointed a new Commission in 1905, and its reports were finally adopted in 1907. Some 1,999,000 acres were thus allocated as locations.

In the Orange Free State immigrant farmers found few natives, the country having been depopulated as the result of internecine strife, indirectly caused by the wars of Chaka in Natal. There are only three small reserves. The first, Witzieshoek, comprises the lands assigned to the tribe of Mopeli, a Basuto chief who submitted to the Republic during the Basuto War of 1865-6; the others comprise the remainder of the lands which the Basuto assigned in 1829 to a section of the Barolong which was driven out of Bechuanaland by Mosilikatze's forces. The Barolong, under their chief Moroka, subsequently assisted the Voortrekkers against the Basuto, and the former did not disturb them in the possession of their lands. When the 'Moroka Ward' was annexed in 1884, considerable areas were found to have been alienated to Europeans and natives. These grants were recognized by the government, and the Seliba and Thaba Nchu Reserves were in 1885 set aside for the accommodation of landless natives.

¹ H. Rogers, *Native Administration in the Union of South Africa*, 1933, p. 118.

² *The Cambridge History of the British Empire*, 1936, vol. viii, pp. 399, 816.

* These various measures had the effect of reserving for native occupation an area which, at the time of Union, amounted to 23,500,000 acres, or roughly 7·13 per cent. of the total area of the country. It is important to note the exact effect of this reservation.¹ The constitution of a native reserve meant only that the state refrained from making grants in the area so delimited and did not allow Europeans to purchase land in it; it did not mean that the land ceased to be Crown land.² It is true that where trusts were created, as in Natal and Zululand, land could not be alienated without the sanction of the Secretary of State, and was therefore fully protected for native use, but, in point of law, annexed land remained Crown property until an individual title had been acquired in it either by grant or purchase from the state. It should be noted that up to 1913 lands held by Europeans could, save in the Orange Free State, be purchased from them by natives, and considerable areas were so acquired, particularly in the Cape Province. In the reserves, land was held in customary native tenure and not under any title which could be defined in terms of European law, except in the mission reserves in Natal where allotments of land had been made in freehold before the institution of the trust.

As part of the reconstruction which followed the Boer War, a Native Affairs Commission was appointed in 1903 to consider the policy to be applied to natives throughout South Africa.¹ Its report marks a definite stage in the history of the land question. Hitherto, the 'reserve' policy had been meant mainly as a protection to natives. Land distribution now became an important aspect of the policy of segregation which has since held the field in the Union.² The Commission was less concerned with the question of the adequacy of the areas occupied by natives than with the need for their strict delimitation, followed by the corollary that thereafter European interests should be protected by a provision that the native right of purchase should be strictly confined to prescribed areas. Effect was given to that policy in the Land Act of 1913, but General Botha, in sponsoring the Bill, was careful to emphasize that the natives had as much right to the country as the white man, and repudiated the idea that such legislation was

¹ See Chap. VI, p. 151.

² See Chap. V, pp. 130 ff.

aimed at providing a labour reservoir.¹ The Act, designed as an interim measure, scheduled the areas already occupied by natives, and restricted purchase outside, except in the Cape Province, where this prohibition was restrained by a judicial decision.² It provided for a commission to recommend what land should be permanently set apart as native and non-native areas. The Beaumont Commission, appointed for this purpose, proposed to set aside additional areas of 17,700,000 acres, bringing the native areas to 38,685,000 acres in all. It is possible to omit reference to the succeeding stages of these proposals, which took a course generally adverse to native claims, since recent events have brought an important change in the situation. Some account will subsequently be given of the nature of the change in policy;³ it will be enough here to summarize some of its results. The Native Trust and Land Act of 1936 purports to release from the restrictions of the Natives Land Act, 1913, for acquisition by or on behalf of natives, a maximum of 15,344,000 acres of land additional to the areas scheduled under the Act, and conveys a promise that the Union Government will assist in providing money for its purchase. Negotiations for the purchase of these lands are to be conducted by the Central Land Board constituted under the Land Settlement Amendment Act of 1934; the land will be held by the South African Native Trust, which will take over the functions of the trusts previously existing. Native trust land may be resumed for public purposes with the consent of both Houses of Parliament, and subject to compensation; it may only be sold or leased to non-natives if this is to the advantage of the native community. The restriction on purchase outside the scheduled and released areas is now extended to the Cape Province. It is proposed to expend a sum of £10,000,000 on the acquisition of the additional lands: it is assumed that this expenditure will eventually be recouped out of the payments the natives themselves make for the occupation of their new lands. Up to November 1937 approval had been given for the purchase of 824,900 acres at a cost of £1,304,000. The accompanying table gives a comparison of the proposed allocation of areas at different stages.

¹ Lord Olivier, *The Anatomy of African Misery*, 1927, p. 72.

² *Thompson and Stilwell v. Kama* [1917], A.C. 209.

³ See below, pp. 805 ff.

TABLE VII
ALLOCATION OF NATIVE AREAS IN ACRES (000's omitted)

Province	1 Areas scheduled by Act 27 of 1913	2 Scheduled areas as extended by subsequent Acts	3 Additional areas recommended by Beaumont Com- mission 1916	4 The revised areas recommended by the local com- mittees of 1918	5 Maximum areas to be released under the Act of 1936	6 Total of scheduled and released areas (Cols. 2 and 5)	7 Percentage of column 6 to total area of province	8 Native rural population 1936 (000)	9 European rural population 1936 (000)
Cape .	12,791	12,925	2,779	3,404	3,420	16,346	9.2	1,826	287
Natal .	5,880	6,343	3,940	911	1,113	7,456	33.0	1,426	45
Transvaal	2,256	2,608	10,673	9,921	10,642	13,249	18.7	1,747	255
O.F.S. .	157	157	314	(alternative suggestions)	169	327	1.0	449	109

It must be noted that the operations contemplated by the Act of 1936 will not make a net addition of 15,344,000 acres to the land already occupied by natives, since some 2,500,000 acres of unalienated Crown land in the released areas, now vested in the Trust, carry a large native population and are not available for further settlement. On the other hand, natives hold in individual title some 1,393,000 acres in released areas and 646,000 acres in European areas, which are additional to the acreage shown in column 6. The land owned by natives in the European areas may be sold to Europeans and may not then revert to native ownership. Failing this contingency, and if the Trust acquires land to the full extent contemplated by the Act, the total available for native occupation will amount to 39,417,000 acres, or 13 per cent. of the area of the Union. The conditions under which natives will be allowed to occupy the land acquired by the Trust are determined by administrative regulations. These provide that the Crown land in released areas available for further settlement will be occupied by tribal groups at the annual rentals or taxes that were in force prior to the commencement of the Act, and which range from 10s. per adult male in the Cape to 30s. in the Transvaal and £2 in Natal. The purchased land will either be added to existing tribal locations or will be used to accommodate tribes and communities to which locations have never been assigned. In exceptional instances, individuals or groups will be allowed to purchase land from the Trust, or with its assistance from private owners. The policy to be adopted as regards the selection and valuation of land

to be acquired by the Trust and its allocation for native occupation was described in a statement issued early in 1937.¹

There is a further feature of land policy to be considered. The policy of segregation requires not merely that native land-holding should be restricted to scheduled and released areas, but that natives should not be allowed to occupy non-native lands, including Crown lands, in any manner which would militate against the principle of segregation; in other words, that they should reside there only as labourers. Ever since 1839 the law had consistently attacked the practice, commonly described as 'Kaffir farming', by which private lands were leased to natives for cash or a share of the produce; but legislation had hardly ever been effective. There had, however, been a gradual increase in the legal disabilities imposed on the squatter on Crown land, as in the Transvaal and Natal, where high rents were charged; as regards alienated lands, the previous series of Acts, differing in each province, had been reinforced by the more drastic Native Service Contract Act of 1932. Section 9 of this Act provided that, in districts proclaimed for this purpose, a landowner would be liable to an annual tax of £5 in respect of every able-bodied male native between 18 and 60 years of age who, whilst domiciled on the owner's land, did not work at least six months in the year for him under a service contract. The enforcement of this measure would have led to the displacement of large numbers of squatters for whom no land was available; no areas were therefore proclaimed under this section and its provisions have been superseded by those of chapter iv of the Native Trust and Land Act of 1936. This chapter, which governs the residence of the native population on farms in the European areas, operates only in proclaimed districts; it prohibits a native from living on land in such a district unless he is the registered owner, or a servant of the owner, or a registered tenant or squatter, and empowers the police to remove under warrant a native who has been convicted of unlawful residence. Servants are defined as natives continuously employed by the owner; the labour tenant is a registered native who is himself or a member of whose family is bound to serve the owner by a contract, which must be in writing if it stipulates for more than six

¹ *Statement of Land Policy under the Native Trust and Land Act, 1936.*

months' service in a year; and squatters are persons not included in either of these categories. No new squatters are allowed to be registered after the application of the chapter, while the owner is required to pay an annual licence fee, increasing from 10s. in the first two years to £5 in the tenth and subsequent years, for every squatter resident on his land. Labour Control Boards, consisting of two farmers and an official of the Native Affairs Department, may be appointed with power to determine the number of labour tenants required by any landowner for his bona-fide activities, and to reduce the number if it is considered excessive. In making the determination, the Board is obliged to presume, until the contrary is proved, that five labour tenants are required and that each is engaged to work at least six months a year. The owner may not keep more labour tenants on his land than the number fixed by the Board; the administration is charged with the duty of providing adequate accommodation for ejected natives in a scheduled or released area. The Act applies the penal provisions of the Masters and Servants' laws throughout the Union to labour tenants and members of their families who are included in the service contract, thereby bringing the Cape into line with the other provinces. A subsequent section of this chapter will deal with some of the effects of the policy embodied in these provisions.²

(c) *South-West Africa*

At the time of the first occupation of South-West Africa, the German Government appears to have implicitly recognized the rights of native tribes to their land, in so far that it made no explicit claim to ownership of vacant land. Orders of 1888 and 1892 prohibited unauthorized occupation of vacant land or transactions with natives, thus asserting the control of the state over the creation of new rights. The basis of the German protectorate, however, was a series of land purchases made from native chiefs by Lüderitz on behalf of the German Government, which usually covered their entire territory, and it is mainly on the strength of these agreements that the Germans occupied land required for colonists; it is of interest to note that the treaty concluded with the Rehoboth Bastards, who were not treated on the same lines

¹ See Chap. XI, p. 661.

² See below, pp. 807-9.

as natives, recognized the joint right of the community to their land. German settlement was confined to the central and southern part of the territory, now known as the Police Zone; Ovamboland and Okavangoland in the north were practically unadministered. Imperial proclamations of 1898 and 1903 provided for the establishment of native reserves, and for the expropriation by the state of land which was formerly native property in order to provide for the settlement of landless natives; but they do not seem to have been implemented. The discontent of various tribes at the loss of their land as the result of transactions with chiefs, the implications of which they had not understood, was one of the causes of the Herero and Namaqua rebellions, which were punished by the confiscation of tribal property. The decree of 1905 authorizing this action explicitly permitted the expropriation of reserved lands, and also of the lands of tribes whose organization had been broken up, and empowered the Governor to reduce unduly large tribal areas. The area left in the possession of native communities amounted to about a million hectares. A reversal of policy shortly before the War led to the issue of orders that reserves were to be allocated for native occupation, but no steps had been taken when war broke out.

South-West Africa was the only German colony lying largely outside the tropics, and the German Government actively encouraged colonization by its own nationals. The mandatory government confirmed existing titles and itself pursued a vigorous policy of settlement up till 1926 under the terms of the Union Land Settlement Act, which provides for state assistance towards land purchase. In particular the Union Government found land for the settlement of 301 families of Boers from Angola and contributed large sums for their assistance. The extent of colonization is shown by the fact that the Europeans in South-West Africa numbered 31,600 in 1935, as against about 10,000 in 1914. The total area of alienated land is 62,930,000 acres, or 31 per cent. of the territory, and a further 12,560,000 acres of surveyed Crown land are available for alienation. Land settlement was suspended for about three years after 1930, but later resumed. The Commission appointed in 1935 to make a general investigation into the situation of the territory did not take an optimistic view of the

possibility of expanding European settlement. In their opinion, all the funds available for this purpose for some time to come will have to be devoted to the assistance of farmers already on the land.¹

The position taken by the mandatory power in regard to rights over the land is as follows. Upon the assumption by the Union of the mandate for the territory, Proclamation 13 of 1920 extended to it the provisions of the Union Land Settlement Act of 1912 and the Transvaal Crown Land Disposal Ordinance of 1903, which had the effect of defining as Crown lands all unalienated land that was the property of the German Government, and in addition all land acquired by the Union Government. The same definition is contained in the Land Settlement Consolidation Proclamation 310 of 1927, which superseded the 1912 Land Settlement Act. At the end of the War, the native population, with the exception of the Ovambo tribes in the north, were scattered, and many natives were residing on private farms or had left the territory. The relaxation of pass restrictions and the right granted to natives to acquire large numbers of stock before provision had been made for their location in reserves led to further movement and an increased need for grazing lands. To secure increased areas of land for the purpose, a commission was appointed in 1920 and met in 1921, when it made a survey of vacant government land. Difficulties arose in securing areas in which there were water supplies, or in providing room for extension, but between 1923 and 1925 certain new reserves were set aside, and Proclamation 9 of 1924 provided for revenue from native sources in these reserves to be paid into native trust funds to be expended solely for native development.

The fund for each reserve is administered by a Board consisting of the Native Commissioner as chairman, the native headmen, and six other persons elected by the natives themselves. Revenues consist of grazing fees, rentals, and dog tax, and sometimes special levies made by the chiefs. An account of the administration of the fund is made annually to a general meeting of the residents of the reserve, when an opportunity is provided for discussion and suggestions. Once land is proclaimed as a native reserve it cannot be

¹ *Report of South West Africa Commission*, U.G. 26, 1936, para. 168.

alienated except with the consent of both Houses of the Union Parliament. The land rights in the reserves are the same as in the Union, and are covered by section 4 of the Act of 1919 (No. 49). The movement of natives into the reserves has of necessity been slow, and involved the collection of cattle, and the assembling of a scattered people whose habits were nomadic, and whose circumstances have been against the development of an agricultural life. Most of the land available required the expenditure of large sums of money for such necessities as water-supplies, fencing, and dipping tanks, which have to be found from the Trust Funds, supplemented by considerable sums out of general revenue: for example, in 1933 £40,000 was granted for this purpose. Between 1923 and 1932 eleven reserves, amounting to a total area of nearly 3,000,000 hectares, were proclaimed in the Police Zone. About 6,500,000 hectares (16,000,000 acres) in the east of the territory, described as a 'reserved native area', are also earmarked for acquisition by natives in the future. The total area of land held by natives, which includes certain areas other than the proclaimed reserves, amounted in 1936 to about 16,325,000 hectares (40,339,075 acres).¹ The reserves are scattered and some are surrounded by European areas. The recent additions show that it is recognized that in some cases they are inadequate, large areas being necessary in a country which is mostly prairie, lacking water, and only fitted for stock-raising. Except in urban areas no legal restriction has at present been imposed on the acquisition of land from Europeans by natives: few of them, however, have the necessary financial resources.

(d) *The High Commission Territories*

The position of the British Government in regard to land in Basutoland has from the first been clear. The main object of the Proclamation of March 1868, declaring the country British territory, was to prevent the Free State from making further attacks on the native lands, which had already been largely reduced by the Treaty of Thaba Bosigo in 1866; the Treaty of Aliwal North in 1869 regained for the Basuto a large portion of the corn lands which would have been lost under the previous treaty. In the

¹ *Official Year Book of the Union of South Africa*, 1937, p. 1156.

Regulations of 1870 the right of allotting land for occupation by members of the tribes was vested in the High Commissioner: this, as an announcement made in 1869 shows, was intended only to be the assumption of a right which had 'been always held by the supreme authority in every tribe'. In practice, this power has been left in the hands of the Paramount, and its exercise is regulated by customary law as recognized in the Code of Lerothodi;¹ but it is subject to the statutory restriction of Proclamation 65 of 1922, that any concession or grant made by the Paramount is invalid unless approved by the British Government. If there is a land problem in Basutoland it is mainly due to the reduction in area by the Free State campaigns previous to 1868. These were essentially land wars, and deprived the Basuto of some of their most fertile and well-watered lands. The Basuto numbered 560,000 in 1936. Even in 1861 the population was held to be congested as judged by African standards;² the area left in 1868 to the native population was 11,716 square miles, much of which is mountain or ravine, and the progressive decline in the agricultural conditions of the territory is due to overcropping and the consequent denudation and erosion which have followed from the attempt of the Basuto to adapt themselves to their altered conditions.³ Since annexation, the only land grants made have been small plots for schools, trading sites, or mission stations, and Basutoland is otherwise entirely in native occupation.

In Swaziland the position has been complicated by the grant of land cessions on the widest scale by the chiefs ruling between 1878 and 1890; it was, indeed, at one time calculated that they had 'conceded' more than the total area of the country; and when the British Government took over the territory from the Transvaal in 1903 its main concern was the problem thus created. By the Swaziland Crown Lands Order in Council, 1907, and the Concessions Partition Proclamation of the same year, government assumed the right, first, to adjudicate on the validity of concessions already made, secondly, to set aside such land as was needed for the exclusive use of the natives, and, thirdly, to treat the remainder as Crown land available for grants to non-natives. The legality of

¹ See Chap. IX, p. 398.

³ See Chap. XVI, pp. 1084-5.

² *The Cambridge History*, op. cit., p. 813.

these measures was upheld by the Privy Council¹ in a judgment which, though of interest, did not deal with the question whether the chief had the right to make concessions of tribal land, nor did it discuss whether the Crown by virtue of its position was entitled to claim rights over the unalienated land.

The position in regard to native lands is on the whole less favourable than that of Basutoland. The result of the proceedings of 1907 left the total area of 4,290,000 acres divided roughly into a native area of 1,638,000 acres and a Crown area of 1,115,000 acres, the rest being in the hands of European concession holders who received freehold title from the Crown. The Swazi have since repurchased certain areas, having borrowed from Basutoland for the purpose, and the Crown has alienated considerable areas out of its own portion. The present figures are: 2,423,000 acres in possession of Europeans or under agreement for sale; 1,706,000 acres in 31 scattered blocks held by natives; and 157,700 acres of Crown land. In 1936 the native population was 142,600 and the European 2,735. The fact that the Crown should have alienated any part of its own holding would seem to show inadequate regard to the needs of the Swazi population. Though 40 per cent. of the European holders are absentees, and a considerable proportion of the grants made to them are in the form only of grazing leases, there seems small probability in normal circumstances of any of the area now in their hands becoming available for native acquisition. There has been as yet no legislation similar to that of the Union directed against native squatters on European farms, but the 20,000 natives resident on these lands have no security of tenure, and farmers receive a money rent up to £1 per hut or insist on labour services for periods up to six months.

In 1885 British jurisdiction was extended by Orders in Council over the region now known as the Bechuanaland Protectorate, and over British Bechuanaland in the south; the latter was constituted a Crown colony in 1885 and annexed to the Cape in 1895. The Royal Charter granted in 1899 to the British South Africa Company brought within its field of operations the territory north of British Bechuanaland, but the protectorate remained under imperial control. Here the Crown in 1885 and again in 1895 dis-

¹ *Sobhuza II v. Miller*, (1926) A.C. 518.

claimed ownership of the land on the ground that as its own position did not amount to sovereignty the waste lands were vested in the chiefs themselves.¹ In 1895, when it was proposed to cede the territory to the Chartered Company, the Tati Concessions Company already held the Tati block, obtained by it on a grant from Lobengula about 1887. The strong protests of the chiefs against the proposed cession turned mainly on the fear that this would involve a change in native rights in the land; and when finally it was agreed that the concession to the company should be limited to the railway 'strip', the latter area was obtained by agreement with the chiefs. Meanwhile, however, the grant of land concessions to European farmers by the chiefs themselves had forced government to exercise a measure of control; a proclamation of June 10, 1891, declared that titles would be valid only if sanctioned by government, and in 1896 it was announced that claims made by any tribe to land would be recognized only if based on occupation which had taken place before the declaration of a protectorate or, if subsequent to that date, then with the consent of the High Commissioner.

In 1898 a commissioner was appointed to delimit tribal boundaries, and five tribal areas were demarcated which received the name of reserves. This operation left an area outside the reserves over which no tribe had proved occupation, and by Orders in Council of 1904 and 1910 these areas were vested in the Crown, it being announced that the chiefs had 'abandoned all rights and jurisdiction in and over' these areas. No tribal claims to land outside the reserves are now recognized unless the land has been occupied with the express sanction of the Resident. The total area of Bechuanaland is 275,000 square miles, now divided as follows: reserve area, 102,000 square miles; old alienated areas, 7,500 square miles; Crown land, 165,500 square miles. The waterless Kalahari carries only a few thousand Bushmen, Hottentots, and Kalahari, and the great bulk of the native population is concentrated in the reserves; the European settlements are largely confined to a narrow strip along the eastern border, including the

¹ Sir Clarkson Tredgold, 'The Constitutional Position of the South African Protectorates', *Journal of the African Society*, vol. xxxiii, 1934, pp. 388-9. See also Chap. IX, p. 404.

Tati District, Ghanzi on the western frontier, and the Gaberones and Lobatsi blocks. The terms upon which alienation of the Crown lands may be made have not been decided, and they remain practically unoccupied and almost wholly undeveloped.

The question of transfer of the High Commission Territories to the Union, which has recently attracted much attention both in South Africa and in Great Britain, is discussed in Chapter VI.¹

(e) *Southern Rhodesia*

In Southern Rhodesia the legal position in regard to the rights to be exercised over land received no definite consideration till the period when the British South Africa Company and the British Government were at issue regarding the terms on which the charter of the former should be wound up.² The original concessions given by Lobengula were for mining rights; Baines and Sutherland had secured agreements of this nature in 1871 and 1872, and in 1888 the agents dispatched by Rhodes had secured the grant, usually known by the name of the Rudd Concession, of all mineral rights; it was this grant which formed the basis on which the Royal Charter was secured for the Company in 1889. In granting the charter, the Crown did not itself assume sovereign rights over lands in the territories included within its scope, but it authorized the company to hold and administer rights obtained under the 1888 agreement, or by any subsequent agreements; it was, however, a condition of the validity of such agreements that they should be seen and approved by the Secretary of State. (In exercising the general powers of administration which the charter further conferred, subject to the general control of the Secretary of State, the Company was to have regard to the laws and customs of the people, especially those concerning the holding and disposition of lands. Subject to the preceding conditions it could make grants of land or mineral rights either on freehold or on leasehold. (In 1890) Edouard Lippert secured a concession from Lobengula empowering the holder to grant, lease, or rent land in his (Lobengula's) name, and this concession was subsequently acquired by the Chartered Company.) In granting mineral

¹ Pp. 173-7; M. Perham and L. Curtis, *The Protectorates of South Africa*, 1935; statement by the Rt. Hon. J. H. Thomas, *Parliamentary Debates, House of Commons*, vol. ccciii, 1934-5, cols. 593-7.

² See Chap. VI, p. 157.

rights the Company acted on the strength of the Rudd Concession, and they made also considerable grants of land, both to colonists and companies, on the authority which they had obtained by means of the Lippert Concession.) In the latter operation their action was subject to some measure of control by the British Government: the Mashonaland Order in Council, 1891, declared that land titles should not be valid without the assent of the High Commissioner, and the concern at the scale on which alienations were being made led in 1894 to the appointment of a Land Commission, which was directed to assign an adequate area of land to the natives of Matabeleland. The Southern Rhodesia Order in Council of 1898, which created an administration with legislative capacity, varied the original terms of the company's charter to the extent of requiring it to assign to natives land sufficient for their occupation; the steps taken to implement this provision will be subsequently referred to.

The question of the Company's right to dispose of land has an important history. The matter was raised in the first legislative council by elected members as early as 1898, and again in 1903-4 in connexion with a report by Sir George Goldie.¹ In 1908 settler representatives claimed that money received from the sale of the land still unallotted should be credited to the budget of the territory and not to the Company. This point became an issue in the discussions regarding the financial adjustments to be made on winding up the charter, and the question of ownership of the land was referred by the Crown to the Judicial Committee of the Privy Council, whose report, delivered by Lord Sumner on July 29, 1918,² stands as one of the classic pronouncements on land rights in British colonial territories. It is of especial value because the claim of natives to these lands was made a definite issue. On the other hand, it must be noted that the scope of the report was in any case limited by the fact that it referred only to the unallotted lands: neither the mineral rights nor the validity of the land titles which had already been given by the company in virtue of the authority obtained through the Lippert Concession were in issue.

The Council held that the Lippert Concession could not be

¹ *British South Africa Company's Directors' Report and Accounts for the year ending 31 March, 1903, 1904*, p. 2; *British South Africa Company's Report of the Ninth Ordinary General Meeting, 1904*, pp. 12 ff.

² *In re Southern Rhodesia* [1919], A.C. 211.

taken to have conveyed any authority over the unallotted lands; it conferred only certain rights to act as Lobengula's agent in the disposal of lands, and this right ceased with the conquest of the country in 1893. In the Matabele campaign the Company had acted only as agent of the Crown, and sovereign rights thus passed to the Crown by virtue of conquest. The Crown could have exercised its sovereign powers in 1893 to declare itself owner of all lands not held in private right, and had it done so the question as between the Company and the Crown regarding the unalienated lands could not have arisen. The court had, however, still to consider whether such rights as were possessed by the natives of the country constituted private rights which the Crown could be required to recognize, in view of the acknowledged principles of law regulating the position of the sovereign power towards private rights in conquered territory. These principles will be referred to in a later section of the present chapter;¹ it is sufficient to state here that the Privy Council found that such rights as the natives of Southern Rhodesia possessed at the time of conquest could not be described as falling into the category of rights of private property which the sovereign power would be required to recognize; and the unalienated land, which included the native reserves, was, therefore, held to be the property of the Crown. As has been stated above, the mineral rights were not in question: they remained with the Company, and were acquired by the Southern Rhodesian Government for £2,000,000 in 1933.²

The establishment of responsible government in 1923 would normally have left the new government with full powers to deal with unalienated lands, including the reserves. But an Order in Council of 1920 had already vested the reserves in the High Commissioner in South Africa, and section 42 of the Letters Patent of 1923, in confirming this provision, expressly laid down that those lands should not be alienated save for the purposes laid down in the Order of 1920, and then only in exchange for other suitable lands. The provisions of section 26 of the Letters Patent prohibit the local legislature from affecting section 42, which can only be modified or revoked by Order in Council.

The determination of rights in the land has, therefore, followed

¹ See below, pp. 829 ff.

² See Chap. XXII, p. 1519.

the same course as in the Union, in so far that all land has been assumed to be Crown land until alienated in individual title. There has, however, been a substantial difference in the provision made for the native in the matter of land, and also in a further important respect. The Charter of 1898, reproducing in this respect the old Cape Colony rule, did not permit of a legal discrimination against natives in the matter of land purchase, and both races had an equal right to acquire land outside the reserves; but, in the case of natives, contracts for sale or encumbrance had to be made in the presence of a magistrate and certified by him as fair.¹ This provision was maintained by section 43 of the Letters Patent of 1923.

The first allocation of land made by the Land Commission of 1894² was ill considered; the attempt made to confine natives to two large reserves was never practicable, and the failure to make suitable provision for native needs is admitted to have been one of the causes of the Matabele rebellion. A further commission which the company was required to appoint in 1914 resulted in the creation of 104 reserves having a total area of some 21,600,000 acres; there was then a population of about 834,000 natives, of whom some 500,000 were resident in the reserved areas. These were finally gazetted in 1920. Even allowing for the fact that about 3,000,000 acres of this area were unsuitable for settlement, the provision was much more generous than that made for native lands in the Union or in Kenya.³ There were, however, influences which before long led to further consideration of the system adopted in the allocation of the reserves. Under the provision which allowed both races an equal right of purchase outside the reserves, natives had by 1923 purchased about 100,000 acres in the European farming districts, and this fact produced from settlers a general demand for separation of the areas available for European and native occupation. With the assent of the British Government, which expressed unwillingness to modify the long-accepted principle of equal rights of purchase, a commission was appointed in 1925 to consider whether any change was justified in the provisions of the charter relating to native lands, with particular reference to the

¹ Order in Council, Oct. 20, 1898, sect. 83.

³ See below, pp. 805-9, 811-13.

² See above, p. 733.

proposal to restrict the native power of purchase to areas set aside for the purpose.

The commission¹ held that from both the European and the native standpoint it was desirable to separate as far as possible the areas held by the two communities; 'until the native has advanced much further on the paths of civilization, it is better that the points of contact in this respect between the two races should be reduced'. The detailed proposals made to secure this end seemed to the British Government to justify their holding that it would be permissible within the terms of the 1898 clause to reserve separate areas for purchase by Europeans and natives respectively. The allocations which had been made in 1914 prevented any such radical readjustment as would effect complete territorial separation, and (though the Land Apportionment Act of 1930, which gave effect to the commission's views, made provision for some considerable interchange of areas, the two communities still remain much intermingled. (Nor was it possible to form the reserves into large homogeneous blocks; they are still eighty-three in number, and often divided by European lands.) But the main feature of the scheme was the provision for each community of an area into which it can expand by purchase, while neither community can in the future invade the area left for the expansion of the other.

A body of opinion in Southern Rhodesia favours a native policy involving segregation in the sense in which that term is used in South Africa.² The Union, however, while admitting that the native should have the means of achieving a suitable development in his own areas, has by the restriction of those areas placed a limit on the means available to the native for improving his condition in them; Southern Rhodesia has not only set aside a relatively greater area for present and future native occupation, but by the provision of purchase areas has made a fuller recognition of the needs of the individual native who has reached an economic or social stage in which residence under tribal conditions is no longer desirable. The results which will ensue if the powers

¹ *Report of the Land Commission*, C.S.R. 3, 1926, para. 63.

² See the Hon. G. M. Huggins, 'Southern Rhodesia', in *Eastern Africa To-day and To-morrow* (ed. F. S. Joelson), 1934, p. 349.

in the Act are fully utilized were shown in a statement¹ issued in 1935 given in the following table:

TABLE VIII

	<i>Acres</i>	<i>Acres</i>
Forests, National Parks, Towns, &c. (approximate)		2,000,000
Area alienated to Europeans up to 31/12/1933	32,100,000	
Unalienated Crown land available for European settlement	15,076,700	
Total European area		47,176,700
Native Reserves as defined by the 1920 Order in Council	21,595,000	
Lands already acquired by government which may become native reserves or native area	82,000	
Area scheduled by Act of 1930 as land open to native purchase	7,464,560	
An undetermined area which natives are expected to take	88,540	
Total native area		29,230,100
Unassigned area		17,793,300
Total area of Southern Rhodesia		96,200,100

The destination of the large unassigned area was left for future determination, but it has been stated that some 12,000,000 acres may possibly be taken up by natives. Large areas of it are infested with tsetse and other parts are deficient in water. The scope which the scheme provides for possible addition to the 'native area' is, therefore, not so large as might at first appear. In the discussions which have taken place regarding the modification of the constitution of Southern Rhodesia,² the British Government has agreed to the principle that the native reserves should no longer be vested in the High Commissioner, but in a Board of Trustees consisting of a chairman nominated by the Secretary of State, the Chief Justice, and the Chief Native Commissioner. The Act of 1930 contemplated a period of six years, subsequently extended to 1941, for natives to move into the reserves allotted for them; but various exceptions were made to this provision. On unallotted Crown land they were to be permitted to remain on such conditions as the government might prescribe, and it is now thought probable that they will not be ejected from this land until it is

¹ A. C. Jennings, 'Land Apportionment in Southern Rhodesia', *Journal of the Royal African Society*, vol. xxxiv, 1935, pp. 296-312.

² *Proposed Amendment of the Southern Rhodesian Constitution*, Cmd. 5218, 1936, para. 11; see also Chap. VI, pp. 178 ff.

taken up by colonists. In certain areas in Matebeleland where natives have been resident since Lobengula's days, the termination of existing tenancies has not been required, and in the Melssetter district the terms on which native occupation is to be permitted are left by the Act to be fixed by regulation. In general, however, only labour tenancy agreements were permitted. The government has made considerable progress in repurchasing lands which were held by Europeans in areas which are now to be occupied by natives. Up to December 1936, 180,400 acres were purchased; and 440,298 acres in the European area have also been bought for native occupation.

(f) *Northern Rhodesia*

In Northern Rhodesia the history of land rights is also partly that of the British South Africa Company. The charter was extended in 1891 to cover operations north of the Zambesi, but already agents of the Company had made agreements with certain of the chiefs in the north-eastern areas of Northern Rhodesia, though they were unsuccessful in securing a treaty from the Ngoni chief, Mpeseni. In 1893 the Company received from the Commissioner and Consul-General in British Central Africa 'certificates of claim' for 2,758,000 acres in the Tanganyika district of North-Eastern Rhodesia. It proceeded to make grants on the strength of these certificates and the agreements with the chiefs, and though its authority to do so is open to doubt, its action was subsequently recognized by the British Government. In 1895 it alienated 10,000 square miles in North-Eastern Rhodesia to the North Charterland Exploration Company, as part of the arrangement for extinguishing the concessions which the German Karl Wiese claimed to have received from chief Mpeseni. In the north-western and central parts of Northern Rhodesia it acted on a treaty obtained in 1900 and an agreement of 1909 from Lewanika, the paramount chief of the Rozi, who claimed a wide authority outside his own territory of Barotseland. These gave rights to deal with all lands outside Barotseland. Whether Lewanika had power to confer rights over lands outside Barotseland proper has been doubted, but it is a point which is now mainly of academic interest in view of the subsequent action taken by the Crown.

In a series of Orders in Council, beginning with the Barotseland-North-Western Rhodesia Order in Council, 1899, the British Government laid down certain important conditions regulating the Company's disposal of land. The first maintained the complete reservation of Barotseland both from alienation and prospecting for minerals; the second required that sufficient land should from time to time be reserved in Northern Rhodesia for native occupation; the third, that no native should be removed from any kraal save by order of the Administrator. These last provisions are important, since the question whether the regulation requiring the setting aside of reserves was equally binding on the North Charterland Company in regard to the 10,000 square miles acquired by it was the main issue in the claim which it brought against the Crown in 1929, and formed the occasion for the arbitral report by Mr. Justice Maugham,¹ which constitutes another of the classic documents on land rights in the colonies. It was ultimately accepted that the Company was bound by this condition.

When the charter was in process of termination in 1923, the land question was not referred to the Privy Council, as had been done in the case of Southern Rhodesia, and the rights of natives in the land did not come under judicial review. The British Government maintained the British South Africa Company's title to the areas held by it in North-Eastern Rhodesia under the 'certificates of claim' and also the concession to the North Charterland Company, subject to the setting aside in both areas of such native reserves as it deemed proper; it confirmed the title in all alienations made by the Chartered Company. Over the remaining land the Crown has full control, save that it has declared that the alienation of land in Barotseland shall not be lawful for any purpose whatever. The Company will receive half the proceeds of all sales or leases of land in North-Western Rhodesia up to 1965, and retains mineral rights over the whole of Northern Rhodesia, except Barotseland.

The question of the areas which should be delimited as native reserves was considered in a series of inquiries beginning in 1903, and certain reservations were made, though apparently only as a provisional measure. This was certainly the case as regards that

¹ *North Charterland Concession Inquiry*, Colonial 73, 1932.

made for Mpeseni and the Ngoni in 1907. In 1913, however, discussions were held in which the chiefs themselves showed a growing anxiety to secure areas which would be free from European encroachment, and the prospect of such security was clearly the inducement which made many of them agree to move with their people into reserve lands. The 1913 discussions resulted in proposals being made for the creation of thirteen reserves, but formal proceedings were delayed pending the report of the 1915 Commission in Southern Rhodesia, and further delay was caused by the War. Three commissions were subsequently appointed to make detailed proposals for the constitution of reserves; one dealt with the East Luangwa Province in connexion with the North Charterland estates in 1924-5, one with the lands in the neighbourhood of the settled and mining areas along the railway line in 1926-7, and one with the Tanganyika Province in connexion with the Chartered Company's land in 1927. Their reports afford a valuable source of information regarding the conditions of native life in the territory. Effect was given to their recommendations by the Orders in Council of 1928-33, which declared that the lands were vested in the Secretary of State, and set apart for the 'sole and exclusive use of natives'; the orders are worthy of note in that they do not allow non-natives to acquire land in the reserves, save upon lease for a period not exceeding five years, and while providing that land can be excluded for public purposes, require the sanction of the Secretary of State if the area exceeds 100 acres. They further keep alive in Northern Rhodesia the clause introduced into the 1898 Charter of the British South Africa Company, which gave natives a right to acquire land on the same terms as Europeans.¹

The reserves thus created, though coming under the same legal provisions, were of two descriptions—namely, the areas reserved out of the large company estates under the terms regulating their alienation, and the lands set apart for native use within the areas defined as Crown lands. Economic conditions and the falling demand for land by Europeans had by the time the Orders were issued lessened the pressure for the removal of natives into the reserves, and it was only in the case of the Company's concessions in the Tangan-

¹ Northern Rhodesia Order in Council, 1924.

yika Province that the Order in Council definitely required their removal within four years.¹ In some areas, however, natives have been moved out of Crown lands into the nearest reserves, a procedure which has proved unpopular with the natives and has in some cases been opposed by neighbouring European farmers as reducing the supply of labour available to them. Elsewhere natives have been allowed to remain in their old villages outside the reserve boundaries, but new villages are required to be built within the reserves. The Natives on Private Estates Ordinance of 1929, which permits natives to settle as labour tenants on farms, but prohibits the leasing of land for a cash rent, has not yet been put into operation. The land situation after the gazetting of the reserves is shown by the following table:

TABLE IX

	<i>Acres</i>
Barotseland	36,819,200
Area of reserves	34,712,800
Area alienated in freehold and in individual titles	8,794,775
Game and Forest Reserves	5,011,690
Crown lands	100,499,800
Total area of territory	185,807,000
Native population (1936)	1,366,425
European population (1936)	10,588

It is proposed to replace the present system by legislation modelled on that recently introduced in Nyasaland.² All unalienated land found after survey to be unsuitable for non-native settlement and to contain no valuable mineral deposits, will be declared Native Trust Land, in which all the existing reserves will be merged except those on the estates of the British South Africa and North Charterland Companies. Natives from congested reserves will be moved to areas thus thrown open for their occupation. Alienations of native trust land to non-natives will be allowed for a period up to 99 years, but only for purposes held by government to be in the native interest after consultation with the native authorities concerned, the proceeds of alienation being payable to native treasuries. The areas held suitable for non-

¹ The Northern Rhodesia Crown Lands and Native Reserves (Tanganyika District) Order in Council, 1929.

² See below, p. 757.

native settlement or mining will be retained as Crown land. Barotseland will be excluded from the operation of this scheme.¹

(g) *Kenya*

The history of land rights in Kenya has its origin in the days when the Imperial British East Africa Company, which received its charter in 1888, was extending its hold over the mainland on the strength of the grant obtained from the Sultan of Zanzibar in 1887. The charter was in all material points in the same terms as that granted to the British South Africa Company, to which reference has been made.² Settlers had already acquired some lands either by purchase from chiefs or from the British East Africa Company before the East Africa Protectorate was declared in 1895, in which year also the charter of the Company was terminated. As shown in reference to Bechuanaland,³ and as will subsequently be shown when dealing with land rights in Uganda,⁴ there had at one time been considerable discussion as to the nature of the rights over land which the state could assume, under the general provisions of the Foreign Jurisdiction Act, on the declaration of a protectorate; but in 1899 the British Government had accepted the view of its legal advisers that the declaration of a protectorate enabled it to claim sovereign rights over land, subject to the recognition of any private rights then existing. In general terms, this was considered to give the right to dispose of 'unoccupied' lands.

Regulations had been issued in 1897 which provided that a certificate might be given for the occupation of land up to a maximum period of twenty-one years, but further stipulated that a certificate would not be granted in respect of any land cultivated or regularly used by any native or native tribe. These regulations were in terms similar to those issued in Uganda in the same year and were intended to meet the same situation;⁵ it should be realized that what is now the Nyanza Province and the greater part of the present Turkana District were then included in Uganda. Fortified by the legal advice of 1899 the government was now

¹ *Report on the Economic and Financial Position of Northern Rhodesia*, Colonial 145, 1938.

² See above, p. 732.

³ See above, pp. 730-2.

⁴ See below, pp. 759 ff.

⁵ See below, p. 759.

able to plan the introduction of conditions more suited to local circumstances, though there is evidence that it was intended to defer the allotment of land on any large scale until the railway to Uganda, which was sanctioned in 1895, had been completed. The railway was completed in 1901, and at once created a new problem for the administration; for the maintenance of a line running along difficult gradients through 580 miles of empty country put a severe strain on the resources of the protectorate.¹ It was this, combined with a growing feeling that the highlands of Kenya were, as Lord Lugard had represented as far back as 1893,² well suited for European settlement, that induced the British Government to endorse the policy of colonization put forward in 1903 by Sir Charles Eliot.³ He went so far as to express a belief that East Africa would in a short time become a white man's country, in which native questions would present but little interest. The great pasture lands and the highlands appeared at the time to be almost free of inhabitants. The predatory raids of the nomad Masai had kept much of the highlands free from occupation by sedentary tribes; like the Matabele and Ngoni they had spread terror through the country and appropriated immense tracts for grazing grounds. Not even the slave-trading Arabs had dared to challenge their supremacy, and earlier European explorers were content to pay 'hongo' to them. But when the prospect of European occupation first presented itself, the Masai no longer appeared to constitute the same danger; the great cattle epidemics of 1883 and 1889, and the internal feuds of 1890, had reduced them to a condition which seemed to remove the obstacles to colonization which their neighbourhood had once presented. It is well to emphasize here that the schemes of settlement affected mainly the highland areas, roughly about one-thirteenth of the whole territory; the most crucial aspect of the land problem is confined to this region and its neighbourhood, and the rest of the country has been affected only in a minor degree.

The need for a more definite control over lands for the purpose of colonization was met by the issue of the East Africa (Lands)

¹ See Chap. XXIII, pp. 1582-4.

² F. D. Lugard, *The Rise of our East African Empire*, 1893, vol. ii, p. 656; see also Sir H. Johnston, *The Uganda Protectorate*, 1902, vol. i, p. 299.

³ *The East Africa Protectorate*, 1905.

Order in Council of 1901. This measure proceeded on the assumption that lands required for disposal must first be brought into the category of Crown property, and it defined accordingly as Crown lands, 'all public lands which for the time being are subject to the control of His Majesty by virtue of any treaty convention or agreement, or of His Majesty's Protectorate, and all lands which have been, or may hereafter be acquired by His Majesty under the Lands Acquisition Act, 1894, or otherwise howsoever'. It went on to give general authority to dispose of such lands by sale or lease. It may be noted that the Act of 1894 referred to was an Indian law which had, as in Uganda,¹ been adopted for the purpose of legalizing the purchase of land for state uses. In the use of the word 'public' as applied to land the Order in Council clearly referred by implication to those 'unoccupied' lands over which it was now accepted that the protectorate had powers of control. It was, however, unfortunate that the order failed to define in terms the character of the 'public' lands to which it referred, or failing that, to add such provisions as would have guided the administration in the interpretation to be placed on the extent of its authority over 'occupied' lands. The terms on which 'Crown' lands, as described in the Order of 1901, could be granted were laid down in the East Africa Order in Council, 1902, followed by the Crown Lands Ordinance of that year, which made, however, no further definition of the 'Crown' lands in question.

The Ordinance of 1902 was clearly intended to offer terms more attractive to settlers than those of the Regulation of 1897; the sale as well as the lease of Crown lands was allowed, and provision was made for the grant of areas on the homestead principle—namely, up to 640 acres. Despite its failure to define further the nature of the Crown lands, the Ordinance repeated the stipulation, based on the Regulation of 1897, that 'in all dealings with Crown land regard shall be had to the rights and requirements of the natives, and in particular the Commissioner shall not sell or lease any land in the actual occupation of the natives'. Though the Commissioner could grant leases of land containing native villages, land in occupation by natives was deemed to be excluded from the lease so long as actually occupied. In 1903 the British

¹ See below, p. 759.

Government gave an indication of its new policy by offering the Zionist Organization a national home in the Uasin-Gishu plateau, an offer which was not accepted. The land grants increased rapidly in 1902 and 1903 and it soon appeared that the administration had underestimated the extent to which natives could assert claims to the apparently empty lands of the highland area; it was at all events clear that by recognizing native occupation only over land in actual cultivation and by allowing grants to be made over that used for grazing, Europeans had been permitted to acquire land in a manner that was beginning to cause hardship to the tribes concerned. To quote an expression subsequently used, the alienation process rapidly 'got out of hand'.

A local committee appointed in 1904 recommended that in view of the difficulties arising from the dispossession of natives, areas should be reserved for them, and added that the fixing of such reserves should precede the further extension of European settlement. The reserve policy was accepted by government, and during the next few years various areas were reserved for native occupation. It is necessary, however, to be clear as to the exact nature of this operation: its purpose was to secure the highlands for European occupation by the process of delimiting in the form of native reserves the areas to which it was intended that surrounding tribes should be restricted. Had the limits of intended European occupation been clearer from the first, many of the subsequent incidents which cast doubt on the good faith of government might have been obviated. As it was, areas which at this stage were proclaimed from time to time under the Outlying Districts Ordinance were not in fact reserved, and some alienations were actually made in proclaimed areas. The limits set to areas in which cattle-owning tribes might graze their cattle frequently deprived them of essential pasture and left watering-places and salt-licks outside native lands. In some cases the movements have involved the settlement of one tribe on areas claimed by another.¹ An incident which arose in connexion with lands allotted to the Masai directed public attention to the insecurity of tenure in these 'reserves'. An agreement had been made with the Masai in 1904 regarding the lands they were to occupy, but as it was subsequently

¹ L. P. Mair, *Native Policies in Africa*, 1936, p. 82.

desired to move them from part of this area, the Laikipia, a fresh agreement was made in 1911. Dissatisfaction with the transfer resulted in an action being brought against the Secretary of State by a section of the tribe in 1912; its main purpose, however, was not to contest the right assumed by the Crown over lands, but to prove that the 1911 agreement was improperly obtained. It was decided by the East Africa Court of Appeal on the strictly technical point of jurisdiction.¹ The court held that the agreement was not a contract but a treaty, and that treaties entered into by foreign subjects (the technical status which the Masai then had as residents in a protectorate) were not cognizable in municipal courts.² The correctness of the decision is debatable; the Masai were given leave to appeal to the Privy Council, but could not afford to pursue it. It may be noted that, whatever the merits attaching to the technical point at the time, it ceased to have force when Kenya was subsequently proclaimed a colony, and the Masai acquired the status of 'subjects'.

The action of the government in disposing of lands now came under attack from two different points of view. Those interested in advancing the programme of colonization held that the conditions prescribed in the Order in Council of 1902 impeded the development of the colony, a view strongly expressed by the Local Land Board instituted in 1904. The Colonial Office was, on the other hand, impressed with the need for preventing land speculation, rife at the time, and the accumulation of large areas not subject to stipulations regarding their beneficial use.³ The controversy turned mainly on the terms on which leases were granted; the Land Board demanded perpetual leases without reassessment of rent; the Colonial Office, which had at first stipulated for twenty-one-year leases, subsequently agreed to a term of ninety-nine years with periodical revision of rents, together with such provisions for controlling transfers as would prevent large accumulations of holdings in the hands of a single person or body. A Bill put forward in 1908, to include these provisions, was withdrawn owing to local opposition, and a similar fate befell another

¹ *Ol Le Njogo v. The Attorney-General, E.A.L.R.*, 1913, vol. v, p. 70.

² See Chap. VII, pp. 272-3.

³ *Tenure of Land in the East Africa Protectorate*, Cmd. 4117, 1908, p. 30.

measure of the same description proposed in 1913. The Colonial Office gave way to the pressure, and in 1915 agreed to increase the period of lease to 999 years and to restrict the control of the Governor over transfers to those between members of different races, a measure designed to prevent the sale of land to Indians.¹ The second line of attack came from other quarters; it was pointed out that the declarations constituting native reserves had so far given them no statutory recognition, and had failed to define the rights of the natives occupying them.

The Crown Lands Ordinance, which was passed in 1915, was designed to meet both the points above indicated. It provided for the issue of leases on the conditions now accepted by the Colonial Office; and, while repeating the definition of Crown lands contained in the 1902 Order, added that Crown lands were to be held to include 'all lands reserved for the use of any native tribe'. The intention of this measure, as was subsequently observed by the Commission of 1933,² was not to reduce the security of tenure in the reserves, but to allow native rights to be better safeguarded and defined; and the provision was one which, as experience has shown, would not have been open to objection had the executive treated the reserved areas as inviolable. But the settlers had never accepted the reserve policy as finally debarring Europeans from obtaining grants in the reserves, and whether the terms used in the Ordinance of 1915 had any influence on the decision or not, it is noteworthy that lands in the Lumbwa Reserve were subsequently alienated for the settlement of ex-soldiers. So far the reserves had not been formally gazetted, and the 1920 Land Tenure Commission, admitting that the allotment of reserves had followed no fixed principle, advocated a formal delimitation and suggested that it should be on a basis which would provide sufficient lands also for the next generation. The position of the Crown again came under discussion in the courts in 1921, this time on a case arising between different parties in the Kikuyu tribe, one of whom claimed to hold land in individual tenure acquired by purchase from another tribe. A decision on that issue might have tested the applicability in Kenya of some of the

¹ See Chap. VIII, p. 336.

² *Report of the Kenya Land Commission*, Cmd. 4556, 1934, para. 1635.

principles enunciated by the Privy Council in the Southern Rhodesia case,¹ but this suit, like that of the Masai, was also decided on the technical ground of lack of jurisdiction. All private rights were held to have disappeared by virtue of the declaration of 1915 vesting the reserves in the Crown.² The court added that the legal position of the native in the reserves was that of a tenant at will of the Crown, a somewhat unfortunate instance of the application of terms of English law to a situation which had no real parallel in that law.

There were no alienations of any considerable extent after 1919, but the justifiable feeling of insecurity among the natives regarding their rights in the reserves impressed the East Africa Commission of 1924. It found that cases had occurred, such as the excision of a large area in the Nandi reserve, where the Governor had either not reported his action to the Secretary of State or had done so later when it was not practicable to reverse the action taken.³ As a result of the Commission's recommendations the formal gazettement of the reserves followed in 1926. The area which these operations left for the purpose of European settlement was about 16,000 square miles; the area of the reserves assigned to the natives in the neighbourhood of the highlands amounted to about 43,500 square miles. The whole area of the colony is 224,960 square miles; but the proportion borne by the area thus practically withdrawn for European settlement to the total area of the colony does not afford a measure of the local disturbance caused. There are in the neighbourhood of the highlands some areas which have a high density of population; that in the Kikuyu reserve averages 283 per square mile, and in the Kavirondo reserve 145; while, on the other hand, areas unaffected by the reserve policy, such as the Northern Frontier province, have an average density of less than one per square mile. The British Government at the time seems to have been less concerned with the result of this operation than with the issue whether Indians should be entitled to take up land in the highland area, a matter which has been dealt with in an earlier chapter.⁴ It should be noticed that while the British Government had assented to the

¹ See above, p. 733.

³ *Report*, Cmd. 2837, 1925, p. 29.

² *Gathomo v. Indangara* [1920]. *E.A.L.R.* 129.

⁴ See Chap. VIII, p. 336.

steps taken to constitute the native reserves, there had up to this time been no declaration by it that the rest of the highland area would be permanently reserved for European settlement.

In 1929 the Commission on Closer Union in East Africa¹ expressed itself, like the East Africa Commission of 1924, as strongly impressed with the necessity for giving natives some effective guarantee of the security of their tenure of their reserves. A draft ordinance of 1928 had proposed to create a local Lands Trust Board in which the reserves should be vested; the substitution of such a Board, created by local ordinance, for the independent trust created by Order in Council in Southern Rhodesia was criticized in England, and the fact that the ordinance proposed to make it possible for the administration to alienate areas within the reserves for white occupation, where they considered this beneficial to natives, was also criticized by some members of the commission² as introducing a further element of insecurity. The revised ordinance which was put forward in 1930 as the result of these criticisms dealt with the question of security by a declaration that the reserves were 'set aside for the benefit of the native tribes for ever', and placed them under a Native Lands Trust Board consisting of government officials, and two non-official members of the legislative council, one of whom would represent native interests.

The question of the sufficiency of the area in the reserves had, perhaps, hitherto been subordinated to the question of the security of their tenure, but the Joint Select Committee of Parliament, which dealt with the report of the Commission on Closer Union,³ required in 1931 that an authoritative inquiry should be made, not only into the adequacy of the security afforded by the Lands Trust Ordinance of 1930, but into the present and prospective needs of the natives in the matter of land. The Land Commission appointed in 1933 to carry out this recommendation was presided over by Sir Morris Carter; its report, issued in 1934, is an important contribution to the study of the land questions in Kenya.⁴ In regard to the question of area, it proposed an addition

¹ *Report*, Cmd. 3234, pp. 43-4.

² *Ibid.*, pp. 350-2.

³ H.C. 156, 1931, p. 44.

⁴ *Report*, op. cit., Cmd. 4556, 1934.

to the existing reserves of 2,629 square miles, of which 1,474 were allotted in satisfaction of claims of right, 896 on grounds of economic need, and 259 as temporary reserves to be held on lease terminable by the government. The needs of advanced natives for land to be held on a more individual form of tenure than is at present possible in the native reserves were to be met by the provision of 939 square miles open for leasing by them. The total area finally reserved for natives would thus be about 50,000 square miles.

The Commission had in addition been required to define the limits of the highlands, in which Europeans 'are to have a privileged position in accordance with the White Paper of 1923'. It recommended the demarcation of certain boundary lines to embrace an area of 16,700 square miles, of which 3,950 were forest reserve, and in order to provide the European community with a guarantee that the area would not be invaded by non-Europeans, it proposed that the boundaries should be laid down by Order in Council. The recommendations of the Commission have been much criticized, particularly in regard to the extent of the area to be added to the reserves, and it may be permissible to give here certain general conclusions which an independent study of the available evidence seems to justify. A large part of the area reserved for Europeans was not in any real sense occupied by natives in 1900, and the delimitation of the reserves deprived tribes of a relatively small area which could be said to have been actually held by them. On the other hand, the reservation of this area for Europeans prevented the expansion by which the more populous tribes would normally have sought relief from congestion, while at the same time the improvement of the economic situation, the growth of communications and the like, introduced conditions which inevitably tended to make the population more congested. It, of course, remains a matter of speculation whether tribes such as the Kikuyu would have been allowed by their more warlike neighbours to expand, or whether they would have been forced to seek the traditional African remedy of migration; it is, however, certain that the reservation of the highland area for Europeans eliminated one possible means of adjustment.

For the tribes, the most important of the issues with which the

Land Commission dealt was not the adjustment of claims of right, but the possibility of satisfying their economic needs by providing larger areas for their occupation; the Commission, however, clearly felt itself precluded from making any recommendation which would involve a material reduction in the area which Europeans had desired to see reserved. Their report appears to have proceeded on the assumption that the highland area which they were instructed to define was one to which Europeans had a claim as of right, whereas the determination of its limits was in fact a matter of policy. At the time when the Commission reported, the actual area alienated to Europeans was 10,345 square miles, of which 11·8 per cent. was cultivated, 40·7 per cent. used for stock, 20 per cent. occupied by native squatters, and 27·5 per cent. not in use. The margin between the 16,700 square miles which were eventually defined by the Commission as reserved for European occupation and that already held by settlers was therefore considerable; there was an even greater disproportion between the area reserved and that in beneficial use; nor are the considerations which these facts suggest seriously affected by the fact that some of the unalienated land is occupied by forest reserves which will probably be maintained as such indefinitely.

On the second question, that of security, the Commission was not working under the same restraint. While it was still taking evidence, the measures adopted on the discovery of gold at Kakamega, in the well-populated Kavirondo reserve, once more aroused public interest in the nature of the guarantees afforded by the Native Lands Trust Ordinance of 1930. The mining rights had from the first been reserved to the Crown; a difficulty, however, arose regarding the surface rights on land required for mining. Under section 15 of the Ordinance, government could, with the consent of the Central Lands Trust Board, and with the sanction of the Secretary of State if the area exceeded 200 acres and the Local Native Council objected to the proposal, exclude the area from the reserve on condition that it provided equivalent land elsewhere; or alternatively, under section 8, if it could be shown to be directly in the interests of the natives to do so, it could give to the mining interest a lease of the land up to thirty-three years, or with the sanction of the Secretary of State up to ninety-nine years.

Uncertain at the outset of the extent of land which might eventually be required, and for how long a period, the Kenya government did not desire to resort to permanent exclusion; on the other hand, land was required for other than the transient purposes for which leases were contemplated by the ordinance. A new ordinance¹ was therefore passed providing that land covered by a mining lease might be temporarily excluded from the reserve, during the currency of the lease, without any provision of equivalent land elsewhere, and enabling government to take this step without reference to the Local Native Council. Compensation was, however, to be given, the sums due being paid to the Native Trust fund.

The Commission was asked for its opinion on these proceedings, and while not objecting to the ordinance as a temporary measure, considered that the principle of the 1930 Ordinance should have been preserved, and land given in exchange for the areas 'excluded', the exchange being temporary or permanent as circumstances might determine. It is certainly to be regretted that an exchange of land was not offered from the first, for in the event it proved that the area required was not considerable, and government would have avoided the reproach, which on the facts it did not merit, that it was seeking to undermine the security afforded by the 1930 ordinance. The incident assumed an importance greater than was justified by the dislocation caused; indeed, the question of the small area actually affected is not that to which native opinion would seem to attach most importance. The real trouble, as is probably clear to the intelligent African, lies in the fact that the Mining Ordinance of 1931, by opening reserves to general prospecting with all its attendant consequences, may in some circumstances constitute a dislocation in the conditions of the reserve more far-reaching than the loss of a small area of land.

When the Commission came to deal with the question of security it recommended that lands gazetted as reserves should be termed 'Native', not 'Crown', lands; that native lands should be vested in a Native Lands Trust Board which had no administrative but only protective functions, and was so constituted as to be removed from the sphere of local politics; it should not, therefore, contain

¹ Native Lands Trust Amendment Ordinance, 1932.

officials nor, if possible, non-officials who are members of the executive or legislative councils.¹ This would seem to suggest that the Board should sit in England, though only one member of the Commission definitely recommended this. It was considered that the enactment of the necessary regulations by an Order in Council would afford a greater guarantee than the passing of an ordinance by the local legislature; the point taken is, perhaps, one which derives its importance from previous circumstances in Kenya rather than from general considerations, since any modification made by a local legislature would require the assent of the Secretary of State. The Commission further recommended that local questions regarding the reserve lands should be dealt with by local Land Boards consisting of natives presided over by the District Officer; as regards the grant of leases in the reserves, which were permitted by the 1930 Ordinance over an undefined area up to periods of thirty-three years, or, with the sanction of the Secretary of State, up to ninety-nine years, the commission considered that any lease exceeding ten acres should be approved by the Trust Board after consulting the local Land Boards; it was of opinion that in the proposed native leasehold areas leases should be allowed to non-natives for any purpose in the native interest in order to assist development.²

Proposals of a similar kind had, as has been mentioned, attracted the notice of the Commission on Closer Union; and critics have objected that a long-term lease for purposes which necessarily involve considerable expenditure would not be easy of resumption, and would thus in effect amount to the expropriation of native lands. The propriety of the grant of such leases, however, must clearly be a question which depends rather on local circumstances in each case than on any general principle. When land is needed for public purposes, or for mining or industrial requirements, the Commission advised that the usual procedure should not be to exclude the area from the reserve, but that it should be 'set apart' and an annual payment for it made to the Local Native Council. The consent of the Local Native Council and the local Land Board would be required, and the Lands Trust Board would have power

¹ *Report*, op. cit., Cmd. 4556, 1934, paras. 1693, 1793, 1817.

² *Ibid.*, paras. 1467, 1541.

to veto any proposal to 'set apart' an area over ten acres. Exclusion would remain a possibility, to be resorted to only if in the opinion of the Governor it was essential in the public interest.

The British Government have accepted these recommendations in principle, save that regarding the establishment of the Native Lands Trust Board in London, which they considered to be unworkable in practice;¹ but the Order in Council giving effect to their decisions had not been issued by the end of 1937. As regards mining leases, however, certain proposals by the Commission were put into effect in 1934 by an amendment to the Native Lands Trust Ordinance, 1930. Land required for mining may be temporarily excluded from the reserve by the Governor with the consent of the Local Native Council and the occupants, who have the right to receive compensation and accommodation in an area of equal size and value which must be added to the reserve for the duration of the lease. Alternatively, land not exceeding ten acres in area may be set apart for mining, subject to the approval of the local Land Board; applications to set apart larger areas are dealt with by the central Board, and in all cases the natives concerned are to be given an opportunity to express their opinion, while compensation for disturbances and rental is to be paid by the leaseholder. Alienation of land in the highlands continues to be restricted to Europeans by administrative action and by the provision in the Crown Lands Ordinance of 1915 which requires government approval to transfers of land between members of different races.

The problem of squatter labour in Kenya has already been referred to.² Planters, in the main, desire the continuance of a system which provides a supply of cheap labour, but stock-owners generally are opposed to it, as they fear the growth in numbers and the illicit movement of the squatters' cattle. The chief evils attendant on the system are said to be connected with the increase of squatter stock, the removal of large numbers of natives from tribal restraint, and the poor quality of their work. The Agricultural Census of 1934 gave the total number of squatters as 114,440, and it was estimated that in the Uasin-Gishu and Trans-Nzoia

¹ *Kenya Land Commission Report: Summary of Conclusions reached by His Majesty's Government*, Cmd. 4580, 1934.

² See Chap. IX, p. 384.

districts alone squatters owned nearly 130,000 head of cattle. The Resident Native Labourers' Ordinance of 1925 had for its aim the encouragement of native labour on farms. The report of a committee of 1934 on the working of this Ordinance recommended a new ordinance,¹ since approved in draft by the Secretary of State, which extends the period of contract from three to five years, allows squatters who have completed the 180 days' work for their employers to engage in work elsewhere, tightens up the regulations for the control of squatters' cattle, and provides machinery for the removal of squatters from areas which are not considered to be under effective control. At the same time it is recognized that the removal of squatters and their cattle in any large numbers to the reserves would result in overcrowding and the increase of erosion.

(h) *Nyasaland*

The history of land rights in Nyasaland has taken an entirely different course from that in Kenya. At an early date climatic and other conditions seemed to point to the country as a suitable area for European settlement, and about 1884 companies and individual settlers began to acquire land by purchase from native chiefs. Some of the concessions were of considerable extent; that held by the British South Africa Company included the greater part of the present Northern Nyasa district; and there were others, such as those held by the British Central Africa Company, the A. L. Bruce Trust, the United Free Church of Scotland, and the African Lakes Corporation, which were of very considerable size. When a protectorate was declared in 1891 the Crown took power to regularize these transactions, issuing 'certificates of claim' to those who could prove lengthy occupation together with development of the land, or authentic purchase from recognized chiefs on reasonable terms; but it was a usual condition that such titles were held subject to the rights of the native population, a large number of which was living in the alienated areas.² It is noteworthy that Sir Harry Johnston,³ when issuing the certificates of

¹ The Resident Labourers' Ordinance, 1935.

² *Report of a Commission on the Occupation of Land*, 1921, p. 12.

³ *British Central Africa*, 1898, p. 113.

claim, admitted that it was doubtful if the chiefs could be said to have power to alienate tribal lands. The concessions covered over 15 per cent. of the total area of the protectorate, and their validity was vigorously contested by the successors of the chiefs who had made them.

When the claims to title had been settled, agreements were made by government with all the chiefs in the protectorate, securing it the control over the remaining lands, henceforth known as Crown lands, and withdrawing from the chiefs the power of further alienation. The area in which claims were held to be good and for which certificates were granted stood originally at 1,018,792 acres, or including the British South Africa freehold of 2,773,260 acres in North Nyasa District, a total of 3,792,052 acres. Subsequent acquisitions by government, fresh alienations in the southern districts, and the withdrawal of the British South Africa Company from its surface rights in northern Nyasa, in substitution for mineral rights, have left a total of 1,303,219 acres alienated, or approximately 5 per cent. of the territory's area. Of the alienated area 72·3 per cent. is in the hands of eleven large estate holders.

Though the area thus obtained from natives was large, the process of settlement by Europeans was slow, and there was never the same 'settler' question as in Kenya. The lands alienated by the Crown in the southern districts, under the terms of Ordinance 18 of 1912, though small in comparison with those held under certificate of claim, served to increase certain problems which the latter had always presented. These arose from the presence of large numbers of native residents on the alienated lands, a problem which, as will have been seen, had occurred also in regard to the Chartered Company's lands in Northern Rhodesia, and had there been met by the creation of reserves. Some of the estate holders in the Nyasaland highlands claimed that as successors to the native chiefs they had the right to demand the customary compulsory labour both from the original tenants and from immigrants from Portuguese territory who had squatted on their lands; the 1931 census showed that 14·7 per cent. of the population had come from Portuguese territory. The situation was reported on by a local commission in 1921.¹ This body was opposed to the delimita-

¹ *Report*, op. cit., p. 5.

tion of European and native areas on the lines which had been followed elsewhere: it held that any restriction of the land in native occupation would seriously prejudice the welfare of communities who are obliged, owing to shortage of water and other local circumstances, to live in scattered villages. It preferred to recommend the assignment of limited areas for European settlement, after the fullest provision for natives had been made.

The East Africa Commission of 1924-5¹ suggested that blocks of the alienated estates should be redeemed by government from a fund formed by a tax on freeholds. Impressed, as in Kenya, with the feeling of insecurity among natives regarding the tenure of their lands, it recommended the constitution of a Native Lands Trust Board, and an ordinance for this purpose was introduced in 1927; at the same time certain areas were gazetted as 'Crown lands required for the settlement of natives', and excluded from alienation under the authority of the Ordinance of 1912. It would seem, however, that policy was as yet in fact undecided, for opinions continued to be expressed, as in 1921, against the reserve policy, towards which the proceedings of 1926-7 seemed to tend. Ultimately a solution was found which seems to have been inspired by the policy of Nigeria or Tanganyika rather than by the principle of segregation favoured farther south. The Native Trust Land Order in Council of 1936 divides the territory into Crown lands (now limited to those acquired for strictly public purposes), reserved lands (that is, lands included in townships, forest reserves, and lands already alienated), and native trust land, which includes the great bulk of what was previously classed as Crown lands. The native trust lands will vest in the Secretary of State and will be administered 'for the benefit of the native inhabitants'. With no intention of subordinating the interests of the native majority to those of the European minority, it was nevertheless felt that a certain amount of European development was of benefit to natives, and the law made provision for alienations for this purpose, to be made after consulting native authorities and limited to leases of ninety-nine years. It will be realized that the policy embodied in the law was one to which the reduction in the demand for land by Europeans had largely contributed.

¹ *Report*, Cmd. 2387, p. 111.

The problem of the rights of natives on alienated lands mainly affected the Blantyre and Zomba Districts; in 1921 half the population of the former and one-quarter of the latter were living on European estates, and a system known as 'tangata' prevailed whereby the native tenant worked for the landowner, or grew crops over which the landowner had a right of purchase, instead of paying a cash rent. Under the terms of the certificates of claim, villages which existed when title was granted could not be required to move; but difficulties arose both in deciding which were the original villages to which these rights applied, and in defining the terms on which residents were entitled to cultivate land for their own subsistence. At an earlier stage landholders had pressed for rent, though in a decision in 1903¹ the High Court decided that rent could not legally be exacted from original residents, and the Chilembwe rising of 1915 was held to be partly due to the levy of rent on their lands. As tobacco cultivation extended, the position of the landlords changed: they now preferred to obtain labour from the resident rightholders rather than to receive rent. Legislation passed in 1904 and again in 1917² did not seem to supply a remedy, and the Land Commission of 1921³ and the East Africa Commission of 1924-5⁴ both made recommendations on the subject.

Fresh efforts were made to find a solution in the Natives on Private Estates Ordinance of 1928, a complicated measure which in effect embodied the 'tangata' system and gave the native tenant on European lands the right to work for wages in abatement of rent, or, if work was not available, to receive facilities for growing economic crops, of which the landholder had to purchase sufficient at current market prices to entitle the native to a rebate of rent. This represented an attempted compromise between the claims of the two parties; but economic conditions, particularly during the depression, made the provisions difficult of adoption in practice; the law was at all events so far from proving a solution that a committee of the legislature considered the matter again in 1934.

¹ *The Supervisor of Native Affairs v. The Blantyre and East Africa Company.*

² Lands Ordinance (Native Locations), 1904; Native Rents (Private Estates) Ordinance, 1917.

³ *Report*, op. cit., pp. 15-20.

⁴ *Report*, Cmd. 2387, p. 111.

There has been no lack of goodwill in attempting the solution of a very difficult problem, which is complicated by the fact that large numbers of immigrants are now resident on these lands, in addition to the descendants of original rightholders. The clear-cut solution of assigning separate areas for the occupation of native rightholders is difficult in most cases, though perhaps not in all; but some modification of the present situation seems necessary if the estate holders are to be in a position to make full use of their lands. Their inability to do so is an economic loss to the community at large, for the northern parts of the protectorate, as the Committee on Emigrant Labour of 1935¹ has shown, have a surplus of labour which can find no employment within the territory.

(i) *Uganda*

The question of land rights in Uganda has been influenced in even less degree by a policy of colonization, though the country was originally regarded as suited for European enterprise.² But the early treatment of the land question is interesting, for it reveals the steps by which the British Government gradually came to a definite opinion as to its legal powers over land in areas held under a protectorate. The agreement made by the British East Africa Company with the Kabaka in 1892 bound the latter not to alienate rights over land to Europeans without its consent. In 1894 the Crown still held, as in the case of Bechuanaland,³ that the declaration of a protectorate gave it no legal powers over the control of land. When in 1895 it was decided to build the railway to Uganda, the necessary powers to acquire land were secured by the application to Uganda of the Indian Land Acquisition Act of 1894; and land was secured for traders by the issue of certificates of occupancy for twenty-one years. Land Regulations were issued in 1897 enacting that land obtained from chiefs would not be considered to be lawfully held unless the transaction had been registered by government. All these steps were clearly insufficient to allow adequate control over the land generally, and in 1899 the British Government, after reference to the law officers of the Crown, finally

¹ *Report*, 1936, para. 130. Cf. Chap. XI, pp. 638, 648.

² M. T. Dawe, *Report on Botanical Mission in Uganda*, 1906.

³ See above, pp. 730-1.

decided that it could claim control over waste or unoccupied land in those protectorates where there was no settled form of government, and where land had not been appropriated either to the Sovereign or to individuals. It must be realized that the legal advisers of the British government were faced at the time with the difficulty of framing a definition of the protectorate powers of the Crown which would fit conditions differing as widely as those of Zanzibar and Central Africa, and if the view taken by them in 1899 did not give to the Crown all the powers which, as the Privy Council report in the Southern Rhodesia case¹ subsequently showed, it might legally have claimed, it appeared at the time to meet the needs of a somewhat complicated situation. It had the disadvantage, however, that it still left the authorities of the day to decide what was a settled form of government and what was unoccupied land. It will be seen from what is said elsewhere that the restrictions which legal advice then placed on the powers of the Crown have disappeared; the theory of law on which the Nigeria or Tanganyika land statutes are based gives the Crown full rights over lands, restricted only by the needs of the native population.

The terms of the Uganda Agreement of March 10, 1900, reflect the view taken in 1899; it was held that more than any tract between the coast and the Congo, Buganda fell within the category of a 'settled government', and the agreement was negotiated on the assumption, which was in principle correct, that all the unoccupied land of Buganda was in the gift of the Kabaka. A few months later agreements were made with the Mukama and chiefs of Toro, and in 1901 with the Mugabe of Ankole; but it was not felt that there was in these territories a settled government having the same powers as the Kabaka of Buganda. The Uganda Agreement reserved a large area, subsequently surveyed as 9,003 square miles, for the benefit of the ruler and his chiefs, numbering in all about 3,700 persons. The land was not considered as a grant, but as property to which the Crown had no claim; thus land falling into escheat would be dealt with by the Governor and the Native Council 'as trustees for the Baganda'.² The 9,003 square miles constituted the Buganda Mailo lands subsequently

¹ See above, p. 733.

² Native Land Law of 1908.

referred to, and the distribution of these lands was left to the Kabaka and his chiefs. The agreement explicitly vested all the remaining Buganda lands, forests, &c., in the Uganda administration. The Toro and Ankole Agreements merely stated that all 'waste and uncultivated lands' would belong to the British Government; in their case only small areas were granted to the rulers and a few prominent chiefs.

In 1902, as the result of a further consideration of the legal consequences flowing from the assumption of a protectoraté, the British Government took a more enlarged view of its powers, and defined its position in regard to land in the Uganda Order in Council of that year. This order was in the same terms as the East Africa Order of the same year, and contained the same definition of Crown lands¹ as in that order, with the same implication that the 'public' lands referred to were the unoccupied lands, over which it was now accepted that the protectorate had powers of control. The Crown Lands Ordinance of 1903 detailed the terms upon which the rights conferred by the 1902 Order would be exercised, and by an amending ordinance of 1910, intended to pave the way for European enterprise, it was laid down that the administration could sell or lease Crown lands on which there were natives, but that natives actually in occupation could continue there as of right until arrangements had been made for their removal or for the payment of compensation, after which they would be tenants at will. That the use of the powers thus claimed over all Uganda lands, other than those preserved under the agreements, did not involve difficulties to the same extent as in Kenya, is due to the fact that the areas best suited for colonization had been withdrawn from Uganda and transferred to Kenya in 1902; while freehold alienations in other areas, which proceeded slowly till 1916, were then suspended, it being announced that future concessions would be in leasehold. The decision was influenced by the fact that with the expansion in the growth of cotton, economic development was increasingly based on native peasant cultivation. Out of the total area of 80,371 square miles in Uganda, excluding open water, 9,627 square miles represent the areas left with chiefs and others under the Agreements of

¹ See above, p. 744.

1900 and 1901; of the total area less than 500 square miles are in non-native hands, and of this area only 115 square miles of freehold and 61 of leasehold represent alienations by the Crown, the rest having been purchased from natives of Buganda after the 1900 Agreement.

The powers of the Crown over land are now regulated by the Crown Lands Declaration of 1922. Based on the Ordinance of 1903, it renders the position of the Crown unassailable in regard to all lands in which it has not granted title. The main problems of the administration, however, have not been connected with the Crown lands, but with the Mailo lands constituted under the Agreement of 1900. In Buganda the political system introduced by the Bahima conquerors, of Hamitic origin, had involved an organization of a feudal character, and the chiefs and notables had held their lands under various forms of customary right and service tenures. The recognition of a proprietary right in the lands allotted to the chief introduced a usage foreign to the native system and created a series of issues all the more embarrassing because of their novelty in African conditions. With the growth of commercial crops, the position of landlord assumed an importance it could not possess in a subsistence economy; he tended to become a rent-farmer, instead of an authority exercising feudal or service rights. Again, the grant of the proprietary right had overlooked the well-established rights of the Bataka, the clan chiefs who were the accepted guardians of the clan burial lands.¹ In passing the Land Law of 1908 the Buganda Council, the Lukiko, disregarded the rights of these Bataka, and the British Government in vain attempted to secure a recognition of their rights; the Lukiko was composed of chiefs who were personally interested, and the hands of the British Government were tied by the terms of the Agreement of 1900. The Buganda Land Law (Survey) of 1909 provided for the issue of provisional certificates pending the completion of a survey, and in 1913 the Buganda Agreement (Allotment and Survey) was concluded in order to adjust discrepancies revealed by the survey.

A further attempt to define individual rights resulted in Ordinance 22 of 1922, which provided for the registration of title in

¹ L. P. Mair, *An African People in the Twentieth Century*, 1934, p. 162.

the Mailo lands with a guarantee of indefeasibility. This, in effect, was a grant of fee simple, the form of registration adopted being that of the Torrens system.¹ The position of the actual cultivators, the Bakopi, in relation to the persons now recognized as proprietors of the Mailo lands, presented a problem of increasing difficulty, and in 1926 the government required the Lukiko to pass a law² restricting the landowners' right of dispossession and laying down fixed rates for rents and charges on commercial crops, perhaps the first legislative enactment in Africa dealing with native rental conditions. The Bunyoro Agreement of 1933 declared that the territories comprised within Bunyoro Kitara are held by the Governor for the occupation and use of the natives, but the right of government to grant a valid title to individuals is reserved. Largely by the aid of the profits of cotton cultivation, the Buganda peasant has lately succeeded in re-establishing his position by the purchase of Mailo lands; the transactions already exceed 20,000 in number, and many of the larger estates have been broken up. Within the area affected by the Buganda Agreement, the survey of the Mailo lands, the registration of the numerous transfers of title involved, the questions arising from the fragmentation and sub-division of holdings are the main land problems of to-day in Uganda, with the possibility of fresh problems in the future arising in regard to the control of credit operations based on land. Outside of the agreement areas, the government has still to deal with those fundamental questions regarding the nature of the rights attaching to the occupation of land under native customary law which are discussed later in this chapter.³

(j) *Tanganyika*

In Tanganyika policy was at one time dictated by the need of meeting demands for land for European enterprise, but has now come under other influences. The Germans from the first adopted a policy of development by European capital, but its objective was the exploitation of products rather than large-scale white settlement. The imperial Decree of November 26, 1895, declared that all land in the German East Africa Protectorates was Crown

¹ See below, pp. 876 ff.

² Buganda, Busulu, and Envujo Law, 1927.

³ See below, pp. 829 ff.

land, but added that the right of the Crown was subject to the rights of private and juristic persons or of chiefs and native communities; in taking possession of Crown land in the vicinity of native communities areas were to be reserved which would secure to the natives enough land for cultivation, taking into consideration future population increases. Land commissions were appointed to determine the area which should be set aside, and a local ordinance required the commissions to reserve for the natives at least four times the amount of land under cultivation.¹ Though some 175 areas in the north-eastern highlands were tentatively declared reserved, no systematic delimitation took place, and it is clear that in this region dispossession took place to an extent that dangerously reduced the areas cultivated by the local tribes. That more land had been alienated in this locality than was desirable was, indeed, admitted by the Germans, and steps were taken to prevent further allotment.

The Mandate under which the British Government succeeded laid down in Article 6 that, in the framing of laws relating to the holding or transfer of land, the mandatory should take into consideration native laws and customs, and respect the rights and safeguard the interests of the native population; no rights were to be created in favour of non-natives without the previous consent of the public authorities. The Tanganyika Order in Council, 1920, vests the land of the territory in the Governor, and the Land Ordinance, cap. 68 of the Laws, originally enacted in 1923, followed a model which, as will be seen, had been adopted in Northern Nigeria.² It declared the whole of the lands of the territory, whether occupied or unoccupied, with the exception of lands over which title had already been acquired, to be public lands under the control and subject to the disposition of the Governor, to be held and administered for the use and common benefit, direct or indirect, of the natives of the territory, and no title to the occupation and use of any such lands was to be valid without his consent. Title would henceforth take the form of a certificate granting a right of occupancy for not more than ninety-nine years; such titles could be granted to natives and non-natives,

¹ Ordinance of December 4, 1896, *Landesgesetzgebung*.

² See below, p. 773.

and could be revoked under certain conditions defined in the Ordinance.

The form in which these powers were taken was dictated by the desire to acquire a control which, while allowing such tenures among natives as is customary under their law, would enable government to intervene to prevent alienations to non-natives. The fact that the Ordinance did not specifically require that the Crown when making alienations should respect native occupation caused it to be compared unfavourably in some quarters with the German decree above quoted; but the guarantee for the respect of native rights lay in the terms of the mandate, and in the fact that the administration, as shown by the preamble of the Ordinance, regarded the law as explicitly designed to maintain the existing customary rights of natives in the land. Some difficulty was also felt in the fact that the Ordinance made the validity of a title depend on its grant or recognition by government, since this would appear to prejudice rights depending on customary occupation. In its reference to titles the Ordinance clearly had in view titles acquired by non-natives, but to meet this point a subsequent ordinance¹ defined a right of occupancy so as to include the title of a native or native community using or occupying land in accordance with native law or custom. A further apprehension was expressed by the Permanent Mandates Commission as to the possibility that the powers given to the Governor to revoke a title to occupancy might be used to interfere with rights obtained from customary occupation; this was met by a declaration that the conditions regarding the revocability of rights of occupancy did not apply to native customary rights.²

The alienations made by the German Government were large; the titles over a total area of 1,922,700 acres were recognized by the mandatory government, but the estates, with the exception of a few which were taken over by government in native interests, were sold by auction in the course of proceedings connected with the War liquidations. The extent of these alienations had left a legacy of suspicion among the tribes on all questions connected with the land, and at the outset there appears to have been some

¹ Ordinance 7 of 1928; see *Laws*, cap. 68, sect. ii.

² *Annual Report to the League of Nations on Tanganyika Territory*, 1932, p. 146.

doubt in the mind of the mandatory power whether circumstances justified an extension of European settlement. Partly as the result of events in Kenya, to which reference has already been made, partly as the result of discussions following the issue of the mandates, the general question of the policy to be observed by administrations in regard to native lands in East Africa attracted at the time much attention both in England and in Africa. The Kenya White Paper of 1923¹ had emphasized the duty of trusteeship for the native population as the basis of the position of Great Britain in East Africa. The East Africa Commission of 1925,² in discussing the implications of this declaration, referred to Lord Lugard's interpretation of trusteeship as a dual charge, involving responsibility not only for the advance of the African, but for the development of the resources of the continent for the benefit of civilization at large. It examined in some detail the position in regard to land in East Africa, and, while holding that Tanganyika was mainly suited to native production, pointed out that the highlands of the north-east and south-west of the territory had areas well suited for non-native enterprise.

The settlers who had purchased the ex-enemy lands in Tanganyika urged the government to encourage the investment of capital for the development of the country; the interests concerned in the future of the coffee industry advocated the transfer to Kenya of the areas round Kilimanjaro.³ Later, in a series of meetings, such as those held at Tukuyu in Tanganyika in 1925 and in the following year at Livingstone, the East African settlers pressed on the government the policy of expanding European settlement throughout East Africa, as an alternative to what they described as the West Coast theory of fostering a purely native civilization. The other side of the case was put by a conference of local administrative officers held at Dar-es-Salaam in 1924, which pointed to the difficulty already experienced in obtaining labour for European estates, and was opposed to further alienation of land for non-native development. The government, without at that stage committing itself to any clearly defined policy, indicated that it was prepared to encourage non-native settlement on a limited scale in areas not

¹ Cmd. 1922, 1923; see Chap. V, p. 135.

² Cmd. 2387, 1925, pp. 22-3, 116.

³ *Ibid.*, p. 123.

affected by the German alienations, and in 1924 disposed of 17,000 acres in the southern part of the territory.

The wider aspects of the land question came under discussion at the Conference of Governors of the East African Dependencies in 1926. The view there held was that while lands effectively occupied by a large and settled native population should be reserved for its exclusive use, lands which were largely jungle or forest, or on which there was only a doubtful title, 'the lands of the spear', should be developed in the most effective manner by government, on the condition, however, that sufficient land for their own use should be secured to the native tribes originally scattered or wandering over it. On such lands European colonization should be encouraged wherever the climate was suitable, and adequate areas were available for settlement without depriving the existing native population of sufficient land for its own use. Land policy had by this time been so far stabilized in Kenya, Nyasaland, and Uganda that the particular interest of these recommendations lay in their bearing on Tanganyika; it is noteworthy that in acceding to them the Governor of Tanganyika at the same time explicitly repudiated the reserve policy.

The reaffirmation of these principles by the Governor, in his address to the first session of the Tanganyika legislative council in 1926, was followed by the gazetting of an offer of 40,000 acres for sale in the Iringa district. Policy was, however, clearly turning more definitely towards the recognition of the need for making a fuller study of the actual situation in the matter of land, and in 1927 a Land Development Survey was instituted, in order to make a comprehensive investigation both of native needs and the economic possibilities of European settlement. This survey approached the *subject along different lines from those adopted by some other colonial land commissions*; the satisfaction of native requirements was postulated as a condition precedent to the release of land for other purposes. It is not possible, as yet, to schedule the complete figures of the areas which are proposed to be thrown open or to be closed to settlement, nor are they for the moment important; in view of the decrease in applications for land by Europeans and of the surrender of farms during the depression period, alienation has since been confined to a small area in the Northern Province.

Moreover, five provinces were closed entirely in 1930, not on economic grounds, but with 'a view to preserving racial homogeneity'; in those areas non-natives will only be allowed to settle if in possession of sufficient capital to undertake operations on an adequate scale, especially in connexion with water supplies. In all, however, only some 786,040 acres have been alienated by the mandatory government, and the total area held by non-natives (including the 3,000 square miles of German grants) amounts to about 4,232 square miles out of a total land area of 339,900 square miles in the territory.

(k) *Nigeria*

In passing over to the British West African colonies and protectorates, it is at once apparent that policy has been little influenced by the pressure of demands for colonization. Here the chief problem before the administrations has been the regulation of concessions for the exploitation of mineral or forest products. Taking Nigeria in the first place, it is necessary to draw a distinction between the Colony and the Protectorate, and within the latter to discriminate between the southern and the northern provinces. The small area in the colony only justifies mention on account of the position it has occupied in the legal history of colonial land rights. Extensive grants of land, under titles stamped by the British Consul, were made by the local King Docemo before the cession of Lagos in 1861. In 1863 the British Government regularized the situation by calling in these titles and issuing Crown grants to natives claiming land. Lands held under Crown grants have since been freely alienated in terms of English law, but the imposition of English conceptions of property law upon native custom has resulted in a confused blending of elements derived from both sources. Though transfer follows English forms, it is subject to all the vagaries of inexpert conveyance, and the courts have held that the native law of family property, particularly in the matter of inheritance, prevails even in lands held under Crown grants.

For the present purpose, however, interest centres in the lands which are not subject to Crown grant, being still held in communal tenure. The Privy Council decided in 1915¹ that these areas had

¹ *Attorney-General of Southern Nigeria and John Holt & Co., Liverpool Ltd* (1915), A.C. 599.

been ceded to the Crown in 1861, subject to the condition that all rights existing in the inhabitants by grant or otherwise from King Docemo, or his predecessors, would have to be respected. The nature of these rights was determined in the Apapa case of 1921,¹ in which the Privy Council arrived at a decision which is noteworthy in that it differs in an important point from the view held in the Southern Rhodesian case.² In both cases the Council proceeded on the principle that rights of ownership are not disturbed by a change of sovereignty; but in the case of Lagos, unlike that of Southern Rhodesia, it found that a customary right of the nature of that existing locally, though a right of a communal nature, could be recognized as a private right to be respected and upheld. The Crown in consequence has only a negligible interest in the lands in the colony.

In the areas comprised in the former Southern Nigeria Protectorate, now the Southern Provinces, the Crown has taken the view that the authority derived from the treaties made with native chiefs did not extend to interference with rights over land. The Royal Niger Company had acquired land rights by various treaties made in the area it controlled, and these were taken over when the charter was terminated in 1900, but government, while maintaining the freehold of the Company in certain areas occupied by its trading stations³ and recognizing the validity of the concessions obtained by it over mineral rights,⁴ did not assert any claim over the native lands, holding that these were in effective native occupation. It is noteworthy that after the assumption of direct rule in Benin, following on its conquest in 1896, the Crown treated rights in the land as having passed to itself, and issued leases; but after his restoration in 1916 the Oba was allowed to resume control over land occupied by his people. In Southern Nigeria the Crown has limited itself to steps designed to control alienation by natives to non-natives; the Proclamations of 1900 and 1903, as modified in Ordinance 32 of 1917, provide that no alien shall acquire any interest in land from a native except under an instrument approved by the Governor; sales have been so authorized,

¹ *Amodu Tijani v. The Secretary, Southern Nigeria* (1921), 2 A.C. 399.

² See above, p. 733.

³ Niger Lands Transfer Ordinance, 1916.

⁴ See Chap. XXII, p. 1520.

mainly in urban centres, for trading purposes, but have not been numerous. The legal position is somewhat confused by the fact that Ordinance 7 of 1918, now appearing as cap. 84 of the *Laws*, retains the definition of Crown lands as all public lands which are for the time being subject to the control of His Majesty by virtue of any treaty, cession, or agreement, or by virtue of His Majesty's Protectorate. It appears, however, that this is in practice interpreted as applying only to land acquired by escheat, purchase, and the like, and not to native lands generally.

The full recognition given to native rights in Southern Nigeria formed an issue of some importance in the discussions which originated during the War regarding the development of colonial resources. The attempts made by the Leverhulme and other interests to secure a freehold area for oil-palm plantations attracted some attention between 1920 and 1926, and the discussions on the subject in England found their echo in the expression by natives of the Southern Provinces of fears lest the government should adopt what was termed the 'Kenya system'. As long ago as 1911 alarm had been shown at the appointment of a committee to inquire into land rights in West Africa. Mr. W. Ormsby Gore, afterwards Secretary of State for the Colonies, in his report on a visit to West Africa in 1926¹ expressed himself as opposed to any system of compulsory acquisition, the use of compulsory labour, or the grant of buying monopolies, but he felt that the protectorate would have much to gain from the introduction of scientific palm cultivation on a large scale; he believed that the natives could have no objection if vacant lands were given on leasehold, the African's chief objection being to the grant of permanent rights in the land. In the attitude which government adopted it was perhaps influenced by doubt as to the value of the plantation as opposed to the peasant method of development,² but in rejecting the application it maintained the point that even a lease could not be obtained without invading fully acknowledged native rights. Since then, however, the United Africa Company has obtained long leases for some 12,400 acres for rubber and

¹ Cmd. 2744, 1926, pp. 108-9.

² 'Correspondence relating to the Policy to be adopted with regard to projected Commercial Enterprises for Cotton-growing on a large scale in the Tropical African Colonies and Protectorates', *Sessional Paper*, no. 1, 1920, Nigerian Council.

oil-palm plantations, and certain timber concessions have since been given, but they are mainly in the form of leases of land reserved under the Forest Act, or secured by agreement with native authorities.

In Northern Nigeria historical developments gave a different direction to land policy. The treaties made by the Royal Niger Company with the emirs between 1885 and 1890 gave it no general rights over land;¹ but when the charter was terminated in 1900 the Crown took immediate steps to issue a declaration of its attitude on the subject of land rights. General policy indicated the maintenance of the institutions embodied in the emirate system, and these comprised a sufficiently well defined practice in regard to land. Under a strict application of the Maliki system of Islamic law which was followed by the Fulani, all cultivated lands are on conquest treated as 'Wakf'; they may be retained by their owners on conversion to Islam, but are otherwise assigned to Moslems; land not under cultivation, including sites in cities, is at the disposal of the ruler. But this theory was not followed in practice: under the Fulani rule there remained a strong residuum of the customary native tenures. The emir confined himself to exercising rights over waste land, the *Jajin Allah*, or 'God's bush'; as regards occupied land, his control mainly took the form (as in India) of levying land revenue based on cultivation, in this case fixed at one-tenth of the produce, the Koranic '*ushur*'. The Letter of Appointment given to the emirs² stated that such rights in land as were enjoyed by the Fulani dynasty as conquerors now belonged to the Crown; the first law on the subject, Proclamation 8 of 1900, provided that no person other than a native of the protectorate should acquire land from a native without the consent of the government; and Proclamation 13 of 1902 permitted the High Commissioner to declare as public lands all lands which were the property of conquered or deposed rulers, or which were not occupied by persons having an original or derivative title under any law or custom. No grants of freehold were to be made. Such lands as were held by the Royal Niger Company, with the exception of one or two minor freeholds, were taken over in full title under

¹ See Sir E. Hertslet, *The Map of Africa by Treaty*, vol. i, 1909, pp. 128-30.

² F. D. Lugard, *Political Memoranda*, 1918, p. 344.

Proclamation 16 of 1902, but these proved to be small in area.¹

The subsequent course of land legislation in Northern Nigeria is linked up with the history of the discussions which led to the appointment of the Northern Nigeria Lands Committee, whose report was issued in 1910.² The connexion which had always existed between land tenure and taxation under the emirate system directed attention to the possibility of introducing in Northern Nigeria a tax based on land similar to the land revenue levied in India; but the course of the discussions was at the same time influenced by theories based on the principle that the state, as ultimate owner of the land, should be entitled to recover as 'economic rent' the increment represented by any increase in land values, whether due to development by the state itself or to individual enterprise. Reference will be made elsewhere³ to the inquiries made by the Committee into the nature of the tenures found to exist in the territory; it is sufficient to state here the two main conclusions at which they arrived. On the question of land rights they held that the 'ultimate ownership' of the land was vested in the chiefs and had been acquired by the British by conquest, but rights so acquired should be exercised for the use and common benefit of natives and in accordance with native custom. As regards revenue, they could find in the circumstances of the territory no theoretical basis on which economic rent could be assessed; it was contrary to native custom for the state to take rent for land, and their preference was for taking a tax of the type already introduced by the Native Revenue Proclamation, 1906—namely, one which was in principle an income tax, modified by the obligation of the landholder to develop the land to an average standard. This, as it will be realized, is not necessarily a tax based on the ultimate right of the state to dispose of land.

The action taken, as embodied in the Land and Native Rights Proclamation 9 of 1910, now standing in a modified form as Chapter 85 of the *Laws*, followed these recommendations. Whereas the intention of the previous law had been to claim for the state only the right to dispose of land not in actual occupation, and to

¹ F. D. Lugard, *Political Memoranda*, 1918, p. 348.

² Cmd. 5102, 1910.

³ See below, p. 839.

control all leases to aliens, the new law declared that all lands, whether occupied or unoccupied, were native lands subject to the disposition of the Governor, to be held and administered for the use and common benefit of the natives of Northern Nigeria. No title to the occupation and use of such lands would be valid without the consent of the Governor, who in exercising his control was to have regard to native law and custom. He was empowered, when granting a right of occupancy to natives or non-natives, to fix a rent and revise it periodically. Rights of occupancy could be for a definite or indefinite term; but no single right of occupancy granted to a non-native could exceed 1,200 acres if granted for agricultural purposes, or 12,500 if granted for grazing purposes.

The distinction between Crown and public lands thus disappeared. The assumption by the state of the 'ultimate ownership' of the land was much criticized at the time;¹ it was described in some quarters as expropriation;² others, pointing to the provision that no title to the occupation of land would be valid without the Governor's assent, claimed that this had the effect of rendering customary native occupation invalid, or alternatively would place on the administration the impossible burden of defining and registering some millions of native titles. The provision by which rent could be demanded on a right of occupancy was also strongly attacked as contrary to native law and custom. It is clear that the intention underlying the assertion of 'ultimate ownership' by the state was mainly to secure full control over alienations, and the manner in which the provision has been applied in practice is of greater importance than the legal form in which it is expressed. As regards the first point raised, the Crown has used its powers to make only a very limited number of alienations, mainly connected with the development of the tin mines. On the second point, the security of customary rights has been maintained by leaving the settlement of land disputes in the hands of the native authorities and their courts; in practice, their control is complete, subject to the power of revision exercised over all decisions of native courts.³ The native authority also deals with land transactions between natives:⁴

¹ L. P. Mair, *op. cit.*, 1936, p. 133.

² See F. D. Lugard, *op. cit.*, 1918, pp. 347, 348.

³ See Chap. IX, pp. 431-2.

⁴ Regulations in Schedule 3 of Ordinance 1 of 1916.

there is no restriction on sale, transfer, or bequest to a blood relation, but the approval of the administration is needed for the transfer of land to a native not resident in the district. Finally, no rent is taken by the Crown in respect of native lands, nor is the imposition of any such charge by native authorities contemplated in the regulations. In this respect, therefore, the form adopted by the law would also appear to be of less significance than its operation in practice; it would not appear that its working has tended in any sense to invalidate customary rights, while it provides machinery for the evolution of native tenures in response to altered economic conditions. As will subsequently be shown,¹ the decision that the form of title, whether on native or non-native lands, should be one of occupancy and not freehold is of far-reaching importance in the development of African land tenures.

(1) *The British Cameroons*

In the Cameroons the system followed by the Germans was similar to that described in Tanganyika. The basic Decree of June 15, 1896, laid down that except in the case of property or other realty to which private or legal persons, chiefs or native communities could substantiate a claim, and saving the rights of third parties established by agreements with the imperial government, all land being ownerless land should be considered as Crown land. In theory this assumed that Crown land as such would eventually be demarcated, but this was never done; in practice, when Europeans made a request for land, a local Land Commission invited persons affected to state their claims; if these were established they were bought out by government, and a Crown lease was issued to the applicants. This procedure had the effect of placing the onus of proof on the native, and its mischief may be illustrated by the case of the extensive North-West Cameroon Concession, which conferred rights over all land which might at any time become Crown land—a contingent grant which the British Government did not regard as constituting a valid title. The official record (*Grundbuch*) entered as Crown property, first, those areas which were obtained by purchase or agreement before the declaration of the protectorate and were taken over by the

¹ See below, pp. 874 ff.

Crown; secondly, such unoccupied lands as had been so defined by the Land Commissions; and, thirdly, certain small areas occupied for administrative purposes. It was later realized by the German Government that their grant of concessions over extensive areas constituted an undue curtailment of native rights, and steps were taken to declare certain areas as *Reservats*, not liable to alienation, in which natives were held to have such rights as were given them by the terms of the grant or by native law and custom.

As in Tanganyika, the German estates were auctioned after the War, some fifty estates covering 258,000 acres being held to have a title justifying this action. At the first auction in London there were no offers; at a subsequent sale in 1925 the greater part were re-purchased by their former German holders. There are now 293,678 acres in German, 19,053 in British, and 260 in Swiss hands, the total alienated to non-natives being 539.4 square miles.¹ The land law of Northern Nigeria was extended to the Cameroons by the British Cameroons Administration Ordinance 1 of 1925. Under that law alienations to non-natives would take the form of leases and not of freehold.

(m) *The Gold Coast and Togoland*

In the Gold Coast, different conditions apply to the Colony, Ashanti, and the Northern Territories. In the Colony control was acquired by gradual steps, and no definite policy was evolved as to the relationship between government and the native authorities. On the whole, coastal tradition led the administration to dissociate itself from native affairs in its hinterland; the Crown was assumed to have no rights over the land, and it is characteristic that here it did not for some time take power, as it did elsewhere, to control alienation by natives to non-natives. There does not appear to have been any formal definition of native rights, but the Crown made its own position clear by provisions, such as that of the Marriage Ordinance Act, by which the lands of a native who dies intestate are distributed according to native law and do not revert to the Crown.² The position was fully accepted in

¹ *Annual Report*, 1936, p. 121.

² *Laws*, cap. 96, sect. 47. See Sir H. C. Belfield, *Report on the Legislation Governing the Alienation of Native Lands in the Gold Coast Colony and Ashanti*, Cmd. 6278, 1912, para. 23.

judgements of the local Supreme Court, which proceeded on the principle that all unoccupied land within the territory under a paramount stool belonged to such stool.¹ The needs of government for lands for public uses were met by Ordinance 8 of 1876, which provided for purchase on full consideration.

The failure to exercise an earlier control over the chiefs in their disposition of land or minerals had unfortunate results. The possibilities of the gold-fields began to attract attention about 1880, and concessions were given on a wide scale by the chiefs. In the absence of any administrative control and of any land survey which would indicate the boundaries of stool areas, great confusion ensued, and it is clear that the concessions made by chiefs did not respect the positions of individual native occupiers.² The need for some form of control was obvious, and in 1894 an ordinance was proposed, similar to the Crown Lands ordinances of other dependencies, which aimed at vesting all waste lands, forests, and minerals in the Crown. In view of the vigorous opposition which it excited it was not pressed, and in the following year government endeavoured to strengthen its case by an investigation into native land rights. This, however, produced an inconclusive report.³ A further measure (The Public Lands Bill) was put forward in 1897, but the Secretary of State, yielding to the representations of a deputation claiming to represent the majority of the chiefs, decided that it should not be proceeded with. The primary object of this Bill was to encourage permanent settlement by recognizing a right of proprietorship over land in continuous occupation: the occupier's title would be secure as against his chief, unless he abandoned the land, when it was liable to forfeiture. Opposition to this Bill came mainly from the chiefs, but they secured the assistance of the native lawyers, and it is worthy of note that the Bill was the occasion for the foundation of the Gold Coast Aborigines' Rights Protection Society.

Failing in legislation of a wider scope, the government contented itself with regulating the conditions of concessions, as between grantor and grantee, by means of the Concessions Ordinance

¹ *Wiapa v. Solomon* (1905), *Renner's Gold Coast Reports*, 1915, vol. i, part 2, p. 410.

² See Chap. IX, p. 471.

³ *Report upon the Customs Relating to the Tenure of Land in the Gold Coast*, 1895.

of 1900. By this measure, all concessions were required to be validated by the Supreme Court, which could modify their terms if conditions appeared to justify it. The procedure adopted was intended to avoid giving the impression that land transactions were to be made subject to administrative control. But the machinery thus set up proved to be seriously inadequate even for its limited purpose of sifting and validating claims, while the measure also failed to provide means of control over the action of chiefs in disposing of communal property, or over the distribution of the proceeds.¹ At the same time the disposal of an important class of cases affecting the land remained in the hands of a tribunal which, charged primarily with the duty of trying issues arising between grantor and grantee, did not possess the requisite knowledge for safeguarding the interests of the people or for fixing terms which would ensure that they derived reasonable benefit from the grant of a concession. Nevertheless, some value attaches to the provision that concessions of mining rights must be limited to five square miles and of agricultural or forest products to twenty square miles, and that reasonable protection must be given to native rights of hunting, shifting cultivation, or collecting firewood. Applicants must also satisfy the Governor as to their financial status, and commence development within a stated period; these conditions are valuable in that they prevent land being acquired by persons who merely hope to profit by disposing of their rights to third persons. The effects of the existing legislation were investigated by a commission presided over by Sir H. C. Belfield, which reported in 1912, but though it expressed concern at the extent of alienations in the colony no further steps were taken. Not the least significant of the effects of this system has been the growth of indebtedness owing to litigation over land and concession rights.²

When Ashanti was annexed in 1901 the opportunity was not taken to assume rights which would give better means of control over the disposal of lands; the system prevailing in the Gold Coast was maintained, save that the Kumasi town lands were reserved

¹ Sir H. C. Belfield, *Report*, op. cit., Cmd. 6278, para. 67.

² *Report by the Hon. W. G. A. Ormsby-Gore on his Visit to West Africa*, Cmd. 2744, 1926, p. 147. *Address by the Governor at the Opening of the 1932-33 Session of the Legislative Council*, 1932, p. 71.

to the Crown, and the government, to which the Ashanti Concessions Ordinance gave powers to regulate the procedure to be followed in the acquisition of concessions, requires negotiations to be carried out through the District Commissioner.¹ Provision for lands required for public uses was secured by Ashanti Ordinances 1 and 2 of 1902, which reproduced the Colony Ordinance of 1876.

It is difficult to obtain complete figures of alienations to non-natives in the Gold Coast Colony and Ashanti. Concessions for agricultural purposes have been few, and it has been stated that only one European company has survived the depression period. The total concessions validated by the High Court covered in 1935 some 8,805 square miles out of 23,937 in the colony, and 2,986 square miles in Ashanti out of 24,379 square miles. Alienations of some extent seem to have been made to natives for cocoa gardens and the like, though no record exists of the amount.

Circumstances gave the administration a freer hand in framing its land policy in the Northern Territories. Exposed to the attacks of Moslem forces from the countries south of the Sahara, these regions had, nevertheless, escaped absorption in the Fulani empires which occupied Northern Nigeria. They had been subjected to the full force of slave raiding, and as a result the population was sparse and disorganized; there were no strong political authorities such as were encountered in the colony and Ashanti. In its administrative policy government was, as already shown,² able to adopt a system which has gradually taken the form of indirect rule similar to that of Nigeria or Tanganyika, and its land policy has developed in the same direction as in those territories. There was no pressure for concessions either in agriculture or mining; the state assumed ownership of mining rights, which are disposed of by the administration.³

The linking up of communications with the south about 1926 seemed to make it desirable to introduce a definite measure of control over the land. In doing so the government was influenced both by the recommendations of the Belfield report of 1912, which had emphasized the mischief of unregulated alienations, and by

¹ Concessions Ordinance, 1903, sect. 4 (3) and Schedule B, *Laws of Ashanti*, 1928, chap. v.

² See Chap. IX, pp. 476-7.

³ The Minerals Ordinance, no. 20 of 1936.

other investigations made in West Africa.¹ In 1927 it issued the Northern Territories Land and Native Rights Ordinance, which, following the lines adopted in Nigeria, declared all lands to be public lands, with the qualification that the validity of existing titles would be recognized if proved within three years. The provisions for the grant of a certificate of title of occupancy also follow the Nigerian precedent; the power of the Governor to levy rent was, however, limited to towns; rights of occupancy were to confer no rights to minerals, and it was declared unlawful for a native to alienate his rights to a non-native without the consent of the Governor. The Ordinance met with the typical Gold Coast criticism that it was a confiscatory measure, but criticism served on this occasion merely to secure, in the revised Ordinance 8 of 1931, the substitution of the term 'native' for 'public' lands, with the added declaration that they were at the disposal of the Governor 'for the use and common benefit' of the native. Rights of occupancy might be granted for periods not exceeding ninety-nine years. Further, the rent clauses were modified by withdrawing the provision which made it permissible for the Governor to levy rent only in urban areas; but a proportion, not less than one-half of all urban rents, and of rents received from non-natives in rural areas, is to be paid to the native authority. Since 1931 an amendment² to the ordinance stipulates that one-sixth of the balance of all rents received shall be paid into a benefits trust fund³ which has as its object the provision of financial assistance for the poorer native administrations. The Crown has so far used its powers only to alienate five square miles, but the occasion for a more extended use may arise if the surveys now being made prove the existence of gold.

The mandatory power has extended this ordinance to the northern area of British Togoland.⁴ It does not appear that use has been made of this ordinance to alienate land to non-natives, there being no outside demand for land. In the southern section the same system prevails as that described in the Gold Coast Colony and Ashanti; its application has been the easier in that there has

¹ See above, p. 772.

² Ordinance 27 of 1936.

³ The Benefits Trust Fund Ordinance, 26 of 1936.

⁴ Lands and Native Rights Ordinance 1931, (Application) Ordinance 2 of 1933.

been no demand for mining concessions. On the other hand, there has been some sale to natives other than local residents, and it is a question whether failure to control such sales is technically in accordance with the obligations of the mandate.¹

(n) *The Gambia and Sierra Leone*

Both in the Gambia and Sierra Leone the small colony areas may for the present purpose be neglected. In the protectorate area of the Gambia the theory of native proprietorship has been maintained on the same lines as in the Gold Coast Colony and Ashanti. Ordinance 6 of 1896 defined public lands to include the lands of conquered or deposed rulers, lands vested in a ruler before the protectorate was declared, as a ruler and not as a private person, and lands not in the actual occupation of persons having under custom an original or derivative title to them. This would give the Crown potential rights over land that is definitely 'vacant', but in the absence of a demand for alienation no steps seem to have been taken for the delimitation of such lands. Alienation to non-natives does not constitute a problem in the Gambia; such questions as arise in regard to land rights are due chiefly to the desire of immigrant natives from neighbouring territories to acquire land for cultivation. The administration has so far left these questions for settlement under native law; the Protectorate Ordinance 30 of 1913, which regulates the administration of land, makes applicable all native law not incompatible with natural justice or the principles of the law of England.

In the Sierra Leone Protectorate the theory of native ownership has also been recognized. The Protectorate Native Law Ordinance 16 of 1905 and Ordinance 16 of 1907 had the effect of vesting the land in the tribe; the assertion of native rights was maintained in the Protectorate Lands Ordinance of 1927 (as extended by Ordinance 32 of 1933), which states that 'all land in the Protectorate is vested in the tribal authorities, who hold such land for and on behalf of the native communities concerned'. Two measures of control have, however, been adopted. The grant of concessions was dealt with in a series of ordinances commencing in 1902 and consolidated in Ordinance 29 of 1931, which regulated

¹ Article V, para. 2.

alienations by tribal authorities. The assent of the Governor is required for such alienations; he may sanction concessions to non-natives of not more than 1,000 acres, if they are for the benefit of the chiefdom, and of larger areas, if for that of the country as a whole, subject to the sanction of the Secretary of State when the area exceeds 5,000 acres.¹ A Concessions Court, constituted as a division of the Supreme Court, is charged with examining and validating concessions recognized by the Governor.

European commercial interests, as in Southern Nigeria² and the Gold Coast, have shown a desire to acquire land rights which would allow them to develop the palm-oil industry. The British Government itself showed some anxiety lest the competition of companies operating under concessions granted in foreign colonies, notably the Congo, should injure British interests,³ but felt at the same time bound to protect the native against the expropriation of his lands. After lengthy negotiations,⁴ it agreed to the passing of the Palm Oil Ordinance 7 of 1913, which empowered the Governor, with the assent of the tribal authority, to grant renewable rights, for a period not exceeding twenty-one years in the first instance, over areas of not more than ten square miles, enabling the concession-holder to erect oil mills to the exclusion of other enterprises. The ordinance did not, however, give rights over land, nor did it give a right to purchase produce. The measure was not fruitful of results, for experience showed that the native was unwilling to sell his produce at prices which often compared unfavourably with those he could earn by extracting the oil himself. A committee appointed in 1924 considered that if the West Coast palm industry was to be placed on a proper basis the oil companies could not be left entirely dependent on the willingness of the natives to sell their palm fruit, but must have their own plantations.⁵ The Concessions Ordinance had been amended in 1922, so as to legalize concessions not exceeding 5,000 acres if made for the sole purpose of cultivating the oil palm

¹ Concessions Amendment Ordinance, 29 of 1906; Concessions Ordinance, 29 of 1931.

² See above, p. 770.

³ *Parliamentary Debates, House of Commons*, 1913, vol. lvi, col. 786.

⁴ *Correspondence respecting the Grant of Exclusive Rights for the Extraction of Oil from Palm Fruits*, Cmd. 6561 (1912-13).

⁵ *West Africa, Palm Oil and Palm Kernels*, Colonial 10, 1925, p. 9.

on scientific lines; the leases were, however, to be granted by the tribal authority, and not more than 1,000 acres could be obtained from any one chieftdom. This provision was repealed by the Concessions Ordinance of 1931, which, however, retains a clause stating that a grant of land made with the consent of the Governor and, where necessary, with that of the Secretary of State is not a concession in the meaning of the Ordinance and may be regarded as valid without submission to the Concessions Court. It does not appear that any concession has so far been authorized under this Ordinance for the cultivation of the oil palm.

The second measure of control, to which reference has been made above, relates to the regulation of the terms of tenancy rights held by alien natives. The Protectorate Lands Ordinance of 1927 provided that such natives require the assent of the tribal authority before taking up land, but their occupation, unless approved by the District Commissioner, would have the value only of a tenancy at will; land occupied with this sanction, if not covered by a lease, could be held only for three years; leases could not extend beyond fifty years, and rents were subject to revision by the district authorities every seven years.

(o) *The French Colonies*

The course taken in regard to land rights in French West Africa was influenced in some degree by the experiences of Algeria. There the demand for land by colonists had been mainly responsible for the conflicts which for long made colonial expansion an unpopular cause in France. The land history of Algiers has chapters reminiscent of the Union; the early *refoulement*¹ or driving back of the natives, and the confiscation of their lands, was followed by the policy of 'cantonment', which presented some of the features characteristic of the system of reserves.² The next stage saw one of those reversals of policy not unknown in French colonial history; the tribes were to be declared proprietors of the lands of which they had 'permanent and traditional enjoyment'.³ That step came too late to preserve the best of the lands for the tribes, and it

¹ See L. Vignon, *La France dans l'Afrique du nord*, 1888, p. 32.

² See the Franck-Chauveau Report, 'Propriété foncière', *Journal Officiel*, 1893, pp. 262 ff.; and S. H. Roberts, *History of French Colonial Policy*, 1929, p. 197.

³ *Sénatus-Consulte* of April 1863.

failed further as a measure of protection, since tribal lands were not closed to European purchase; on the contrary, a law of 1873 applied to native lands the principle of French law which recognizes only individual rights and not communal ownership; co-sharers in tribal lands were to apply for the partition of their shares, and these were to be alienable. Caught in a maze of litigation, the Arabs in the years 1883 to 1889 lost 40 per cent. of their lands,¹ largely through executions for debt, and further legislation was necessary in 1897 to check this process and give some stability to tribal conditions. The conditions in French West Africa differed in one important respect from those in Algiers; there was little pressure to secure land for colonists. An attempt to start a plantation in Senegal early in the nineteenth century had proved abortive, and henceforward economic policy was mainly directed to the development of a peasant economy assisted by the state.

In French Equatorial Africa, on the other hand, the fact that the reduction of the home subsidy for development had left the colony without resources, and that a relatively greater capital outlay was required to overcome climatic and transport difficulties, indicated a policy of development through European *entrepreneurs* similar to that which appeared to be achieving some success in the Congo Free State. This method involved the concession of monopolistic control over forest produce, with the guarantee of an ultimate freehold in selected areas of land proportionate to the development effected. Already in 1893 certain monopoly concessions of this type had been given by the Ministry, but the agitation which followed, based mainly on political grounds, caused the government to revoke them in 1895. The demand for concessions led, however, to the appointment in 1898 of a Commission on Colonial Concessions, which recommended the introduction of legislation fixing the terms on which they could be granted. The decrees issued in 1899 as a result of their proposals represented the first definite statement of the nature of the rights claimed by France in the land of her tropical African territories.

In a number of treaties previously concluded with native chiefs

¹ V. Piquet, *La colonisation française dans l'Afrique du nord*, 1912, p. 207.

the French Government had guaranteed their rights over the land, and the Decrees of February and March, 1899, showed a formal desire to recognize the existence of these rights. In claiming only the *terres vacantes et sans maître* for the state they follow the principle of the French code; but its application to colonial territory has been criticized by some French authorities on the ground that there is not, even in the less thickly populated Sudan, 'an inch of land without a master',¹ a point of view which, as has been seen, has also received recognition in some of the British West African areas. The claim may in theory be justified in almost any part of Africa, if one does not insist that the term 'ownership' is equivalent to the proprietary right as understood in Europe, but it is possibly more nearly descriptive of the settled than the pastoral or forest areas. The value to Africans of the admission of this position would depend in any case on the nature of the terms given by the state on extinguishing rights over the lands it may require for settlement or colonization; and the consequences which the decrees of 1899 involved similarly depended on the interpretation given in practice to the term 'vacant lands'. Those who supported the system of monopolistic concessions in French Equatorial Africa pointed out that they only contemplated the grant of freehold areas at a secondary stage, the first stage being that of rights over the collection of forest produce, and it was claimed that the form of the decree would enable areas to be selected for alienation after further investigation had shown that rights were non-existent or so tenuous as to be easily compensated, such as hunting rights or rights of occasional grazing.

In the application of these decrees the two territories have adopted methods so different that it is well to treat of them separately. In French West Africa the framing of the land decrees has shown evidence of a definite concern for native rights; this was an attitude natural to an administration which had experience of the organized conditions of the tribes in Senegal or the Sudan. When, on the formation of the Federation, the legislation of the different colonies was consolidated in the Decree of October 23, 1904, the basic principle that vacant lands belong to the state was

¹ M. Delafosse, *Haut-Sénégal-Niger*, 1912, vol. iii, p. 14; P. Dareste, *Le régime de la propriété française en A.O.F.*, 1908.

maintained, but it was laid down that lands forming the collective property of natives could only be ceded to individuals after approval by *arrêté* of the Lieutenant-Governor. There are some differences in detail as between the various colonies; in the Niger, an *arrêté* of August 12, 1924, prescribed that natives could not be evicted without their consent; but in the Sudan, under the *arrêté* of April 24, 1920, natives could only claim compensation for removal; in French Guinea, by the *arrêté* of April 13, 1912, land required for native cultivation must be reserved from concessions, but removal of natives to other lands can be effected by agreement or payment of compensation.

Though in French West Africa the position taken by the state in regard to 'vacant' lands has created less difficulty than in some other territories, owing to the lack of demand for land for colonization, the legal position has not always been easy. In 1907 the West African Court of Appeal held that, in succeeding to the rights of a chief over territory in which no individual property was recognized, the French Government acquired absolute rights over all land not held under title, a decision dictated by the inability of French law to recognize any right in land other than that of the individual, with the result that a communal tenure can have no status at law.¹ The government at one time accepted this position so far as to agree that the state was legally proprietor of all lands other than those on which natives had acquired title by administrative concession or by prescription; but the courts, in their turn, denied that prescription could be extended from French to native conditions. The position taken up by the courts was thus at variance with the intentions of the 1904 Decree, and a Land Commission was appointed in 1915 to recommend a solution. This commission did not report owing to the War; but there has been no sign that the government wishes to take undue advantage of the position which the legal decisions have created for it.

The various decrees on the subject of land were consolidated in that of November 15, 1935. In repeating that the state is owner of lands vacant and *sans maître*, it adds that it has control also of any land not used or occupied for ten years. Land required for public uses, up to 100 hectares, can be taken up by *arrêté* of the head of the

¹ P. Dareste, *op. cit.*, 1908, pp. 16, 20.

province; the sanction of the Governor-General is needed for larger areas. Areas up to 200 hectares can be alienated by local *arrêté*, from 200 up to 2,000 hectares by *arrêté* of the Governor-General; those in excess of this figure must be sanctioned by a decree of the French Government. The terms of a concession must indicate the areas which are occupied by or reserved for natives; land under cultivation cannot be taken up without compensation to the occupier, which must be arranged by the administration. Concessions in rural areas are given in the first instance provisionally, title being confirmed on compliance with stipulated development conditions. There were a certain number of concessions given out before 1903 which were afterwards abandoned by the holders; the total now recorded as held by concessionaires is 93,284 hectares held on provisional tenure, and 57,419 hectares on 'definitive' tenure. The majority of these concessions are in the Ivory Coast and French Guinea, and are used for the development of banana, rice, and coffee plantations.

In Equatorial Africa monopoly rights were granted in the first rush of concessions over about two-thirds of the whole territory. They were divided between some forty companies, and carried a monopoly over all forest produce for thirty years, subject to native rights in areas to be defined by government, in return for the payment of a low annual rent and of 15 per cent. of the profits to the state. Freehold was ultimately to be given over all 'developed' areas, of which there was a somewhat complicated definition, including the planting of 150 rubber trees for each ton produced. It is noteworthy that the first protests against the system came from English traders affected by the operation of the monopoly, and pressure from the British Government resulted in their receiving a grant of land in compensation, together with a considerable cash indemnity. An incidental result of their complaints was a decision of the French Court at Loango in 1900 that, until the native lands were delimited, the entire territory of the concessions must be taken as subject to the rights of the concessionaires. It is not necessary to recall here the reign of anarchy which these monopolies introduced, or the hardships which they inflicted on the natives; in regard to the land, it is sufficient to say that, while they did not, in the first instance, actually deprive natives of its

possession, the use of it was gravely restricted. In the treaties made with chiefs during the original occupation of the French Congo the government had agreed to respect their rights over land; but native lands were defined in the ministerial instructions of 1899 as only the areas necessary for the cultivation of food-stuffs. The decision of the Court of Loango led to demands by the Colonial Ministry in 1901, and again in 1902, that an attempt should be made to delimit native reserves, but the opposition of the concessionaire companies prevented any effective steps being taken in this direction. The local administration contented itself with issuing an *arrêté* in 1903, declaring that in principle the native reserves should extend over one-tenth of the conceded territory, a provision which could have no effect in the absence of a survey which would allow of their delimitation.

The revulsion of feeling in France against the abuses produced by the monopolies, and the growing proof of the economic failure of the companies, combined to force the French Government in 1910-12 to consider a revision of the system. Faced by the same difficulty in the earlier days of their occupation of the Cameroons, the German Government had materially cut down the original grants in agreement with the concession companies,¹ and a similar use of the principle of 'cantonment' was urged on the French Government by critics of the monopolistic policy. A long series of negotiations resulted in the abandonment by a number of the companies of their rights under the 1899 concessions, in return for 10,000 hectares of land, a monopoly over rubber collections for ten years on the original areas, freehold over the area under cultivation at the end of that time, and after that for a further ten years a rubber monopoly over ten times the freehold area, the additional area brought under cultivation at the end of the second period likewise to become the property of the companies. This arrangement provided for a return to the state of 31,500,000 hectares out of the 87,000,000 alienated in 1899. At various times after 1912 other companies came into the agreement: in some cases a fixed area was at once given in freehold as compensation, while the concessions of a certain number of companies which stood out of the arrangement expired in 1929. The commitments

¹ See below, p. 775.

of 1900 have thus been liquidated at a heavy loss to the natives, while the financial gain of the monopolistic system to the colony was comparatively small. The authority of the local administration to grant concessions has also been revised; an *arrêté* of 1926 provided that the power to grant concessions up to 10,000 hectares, conferred by the legislation of 1899, should be subject to the condition that land over which natives hold rights can only be alienated on payment of compensation at rates fixed by the administration. No figures are published of recent alienations, but they appear not to have been numerous.

(p) *The French Cameroons*

The land law which the Germans introduced in the Cameroons has been described in dealing with the British Cameroons.¹ At the outset of their rule they made concessions of the type of those granted by the Congo Free State and in the French Congo, mainly with a view to the collection of rubber. That made to the *Gesellschaft Süd-Kamerun*, in 1898, comprised an area of 7,200,000 hectares, but 'subject to native land rights'; in the following year rights over 4,500,000 hectares were given to the Northwest-Kamerun company, which had the right to choose Crown land within this area, but in occupying such land it was to respect existing native rights. Difficulties which arose with the Süd-Kamerun company led to the application of the process of 'cantonment' to its grant, and in 1905 the area was reduced to 1,500,000 hectares, and the conditions were revised; the Northwest company failed to meet its obligations and its grant terminated in 1913. Meanwhile a considerable number of concessions had been made to individual grantees, mainly in the south-west of the territory, for cocoa, rubber, and oil-palm plantations. In the liquidation of ex-enemy property at the close of the War the estates were auctioned of which the title had been recognized by a commission appointed for the purpose, subject to the right of the state to exercise pre-emption at prices fixed by the commission. By 1925 some 362 properties had been dealt with, of which 219 were auctioned and 107 were taken in pre-emption, while 40 sites occupied by the German Government for administrative purposes were held to have passed to the new administration

¹ See above, pp. 774-5.

under Article 120 of the Treaty of Versailles. The former German owners did not succeed in regaining their holdings to the same extent as in the British Cameroons, and the area in their hands is now relatively small; a number of the pre-empted properties have since been resold to French subjects.

The provisions of the French West African legislation of 1904 were extended to the Cameroons by a Decree of August 11, 1920, thus giving the state a claim to the ownership of 'vacant' lands. A local *arrêté*,¹ defining the terms of application of the Decree, recognizes as a distinct category land in the neighbourhood of villages over which natives exercise usufructuary rights: these are defined as reserves. Vacant land is alienable by the state under different rules for urban and rural lands; a proposal to alienate must be published in the *Journal Officiel*, with a local notice to natives concerned, who have a right to object; but it is worthy of note that if claims, which are heard by the administrative authorities, are proved baseless, the claimant is liable to a fine. As in French West Africa, a provisional title is first given, and is completed only on proof of compliance with the conditions laid down regarding beneficial use and the like. Grants of more than 1,000 hectares of rural lands, as against 2,000 in French West Africa, must be confirmed by a decree from the Colonial Ministry. Land belonging to native communities can be alienated, subject to the approval of the local administration.

The 'native reserves' are considered to be held in usufruct and not in ownership, and natives cannot dispose of them, though they may be alienated by the state, subject to the grant of compensation to the occupiers. There has been no regular delimitation of these reserves. The German Government had set aside certain *Reservats* in districts such as Dschang, where they regarded native occupation as too dense to allow of any alienation;² these were maintained by the French administration, which added certain other areas to this class. While the explicit recognition that land in actual occupation is to be regarded as reserved may represent an advance on previous legislation, rights in such land are inadequately safeguarded in the absence of a survey or other means of delimitation. Colonization has been accepted as

¹ *Arrêté* of Sept. 15, 1931.

² See above, p. 775.

part of the policy of the mandatory power,¹ and colonists have received assistance through loans given by the local *Caisse de Crédit Agricole*. For climatic and other reasons, however, alienations have not taken an extended form; the individual grants are not large and are mainly for growing coffee and bananas. It appears that up to 1935 the administration had given out 68,745 hectares in provisional and 21,969 hectares in definitive right. At the same time it is clear that the alienation of land has begun to cause some measure of conflict with native rights, and the administration has lately indicated that certain further areas are being set aside as 'reserves', in which no Europeans may acquire rights, though it is considered that natives from more congested areas can properly be moved into them. In French Togoland, to which the decree of 1920 also applies, there has been very little colonization, and for some time no alienation has been made.

(q) *The Belgian Congo*

The history of the Belgian Congo at one time reflected the results of the development of the concession policy in an even more extreme form than that of French Equatorial Africa. In the earlier days of the Free State, King Leopold had no method of securing capital for railway or similar developments other than by the grant of large areas of land, or of monopolies over the products of the soil. Thus the Matadi-Stanleypool Railway owed its existence to the promise, in 1886, of an extensive grant of land, and the railways connecting the Upper Congo with the Lakes were similarly financed in 1902. This principle was afterwards extended to obtain revenue which neither the customs receipts, limited as they were by the Berlin Act of 1885, nor direct taxation were able to supply. The first declaration of the rights claimed by the state over land was framed when the concession was given for the Matadi Railway; it took the same form as that which, as has already been shown, was adopted in 1899 in the basic decree regarding lands in the French African colonies—namely, a statement claiming vacant lands as the property of the state;² vacant

¹ *Rapport annuel au conseil de la Société des Nations sur l'administration du Cameroun*, 1932, p. 105.

² Ordinance, July 1, 1885; Decree, Sept. 14, 1886; *Codes et lois du Congo belge*, p. 1645.

lands could be alienated by the administration, and sales of land made by natives were only to be recognized if confirmed by the state. In Belgium, as in France, writers have criticized this measure, pointing out that all land is claimed by some tribe, and that, in particular, palm trees have always a potential native owner.¹

The concessions made did not, however, in the first few years, involve taking actual possession of the land, and native rights over it were not in fact restricted; it was only when the Free State, in the attempt to improve its resources, introduced a state monopoly over the collection of rubber and ivory that it adopted a more rigid interpretation of its own decree, in order to give itself the necessary rights over the land. Native rights were now held to exist only over the area under actual cultivation, with the corollary that all other land could be controlled or alienated by the state. The measure had a double purpose; it gave a freer hand to the state in making grants to railway and other development companies, and enabled it at the same time to assert a legal claim over the forest and other products of land not actually under native cultivation. It utilized this power to give concessions of the monopoly of purchase of rubber to companies (such as those subsequently merged in the *Compagnie de Kasai*), and also to make direct collections itself through the rubber tax.² The protests of traders against the monopoly, and the widespread feeling against the abuses produced by the rubber tax and use of forced labour, led to the appointment of the Commission of Enquiry of 1904 and to a material modification of the system of collection, together with a change in the land law. A Decree of June 3, 1906,³ recognized that land inhabited, cultivated, or exploited in any manner was 'occupied', and indicated that steps were to be taken to demarcate native reserves, which would be at least three times as large in area as that of the 'occupied' land. Such lands could be sold by natives, subject to the sanction of the administration. The delimitation was, however, effected only within the territory of two large concessions, the Bus-Bloc (the freehold area owned by the *Compagnie du Congo* and its subsidiaries) and the Katanga:

¹ A. Vermeersch, *La question congolaise*, 1906, p. 175; H. Vanderyst, *Congo*, 1925, p. 731.

² See Chap. X, p. 593.

³ *Codes et lois*, p. 1646.

and, owing partly to the difficulty of allowing for the practice of shifting cultivation, partly to the cost involved, the attempt to complete it was abandoned in 1922.

The abuses of the Free State monopoly system belong so much to past history that they need not be enlarged upon here. But it is important to note the remarkable extent of the concessions granted. They were of three kinds. The grants to the railway companies covered over 9,000,000 hectares. The terms of the Katanga concession were more comparable to those of the charters in which Great Britain entrusted administrative functions to commercial companies, but they also included the grant of freehold property in one-third of the territory which the Company brought under control. In the end no division was made, the whole territory being placed under the administration of a joint body, the *Comité Spécial du Katanga*, two-thirds of whose members represent the government and one-third the Company, the latter receiving one-third of the revenues. The total area subject to the administration of this body is estimated at 45,000,000 hectares. The third type of concession was that to which reference has already been made, the monopoly of forest produce. These monopolies, in their original form, covered an immense extent of territory, but as they did not confer freehold rights their area was not calculated. The total area covered by grants of freehold when the Congo Free State was annexed by Belgium in 1908 has been calculated as 27,100,000 hectares, including the area representing the share of the Katanga Company.¹ The Belgian Government concluded a series of negotiations with the concessionaires, other than the Katanga Company, as a result of which they abandoned certain of their monopoly rights in exchange for the right to freehold areas to be selected within the boundaries of their concessions, and also reduced some of the original freehold areas. By these reductions a total of 9,209,483 hectares reverted to the state.²

The government continued to encourage European enterprise, but it now alienated land under concessions of a different type. Under this form, the grantee had the right, at the end of a preliminary period, to choose blocks of land up to a fixed maximum

¹ T. Heyse and H. Leonard, *Régime des cessions et concessions*, 1932, p. 186.

² Ibid.

within an area from which other claimants were excluded during this period, the area to be acquired depending on the fulfilment of certain development conditions. The most important grant of this type was that made in 1911 to the *Huileries du Congo Belge*, which was associated with the Lever interests.¹ This Company obtained the right to lease a maximum of 750,000 hectares, divided between five circles of a radius of 60 kilometres, the amount leased in each circle being dependent on the erection of oil mills of a given capacity. The selection was completed in 1926. In 1945 the Company will be entitled to freehold rights in an area of 150,000 hectares, not more than 40,000 being in any one circle; while, if in the five years preceding 1945 it exports 30,000 tons of oil, it will be entitled to ownership of the whole 750,000 hectares. The state will be entitled, every ten years from 1951 onwards, to take back undeveloped land in blocks of not less than 100 hectares.² A somewhat similar concession extending over 30,000 hectares has been given to the *Compagnie Sucrière Congolaise*. The recommendations of the Advisory Committee on Labour in 1928³ led in 1929 to a further change in the concession policy; no further mining concessions were to be granted, and only one-third of the territory was to be open to large, and one-third to small-scale agricultural concessions.

A special arrangement has applied, since 1928, to the Kivu region, which is the only area of the Congo proper that appears to be climatically suitable for European colonization. Here the *Compagnie des Chemins de Fer des Grands Lacs* had a concession which, as revised in 1921, gave it an option over 400,000 hectares, to be selected by 1936. In order to resume its control, the government reconstructed this Company on the lines adopted for the Katanga; the new *Comité National du Kivu*, in which government holds a controlling interest, is charged with the development or colonization of an area of 8,000,000 hectares. The government policy, however, seems to be generally opposed to the extension of colonization in the Congo.⁴ The total area so far alienated by the *Comité* is 23,276 hectares. The progress of alienation in the Congo in recent years is shown by the fact that the state alienated 84,649 hectares in

¹ See above, p. 770.

³ See Chap. XI, p. 646.

² T. Heyse and H. Leonard, *op. cit.*, pp. 278-85.

⁴ *Rapport de la Commission des Colonies*, no. 87, 1936.

1932, 69,888 in 1933, 32,926 in 1934, and 14,904 in 1935. A certain number of concessions have lapsed or been abandoned, and it may be taken that, excluding the Katanga and Kivu areas, in which the state retains substantial rights, the total area now alienated is about 5,275,000 hectares, out of the total area of 235,000,000 hectares.

As already shown, no general delimitation of native lands, such as was contemplated by the 1906 Decree, has been made in the Congo. It is now considered sufficient to go over the ground when a concession has been applied for and to mark off the areas covered by native rights; these must remain untouched unless the concessionaire can come to terms with the right holders. Where the sale is made by natives themselves, under the rights recognized by the decree of 1906, the law provides for a careful supervision of the transaction. An Ordinance of October 6, 1930, stipulated that any such sale must be preceded by an inquiry on the spot by a commission of three members, consisting of a member of the judiciary as chairman, a missionary, and either an official or leading local non-official European; their report must give an opinion as to the fairness of the price and indicate the persons to whom it should be paid.¹ A further amendment of May 31, 1934, substitutes for the commission a special delegate of the Governor-General, and provides for a period of two years during which the evidence recorded in the inquiry may be contested.² Provided, therefore, that the area in which native rights exist is correctly ascertained, the safeguards provided against the abuse of the natives' right of alienation are substantial.

Meanwhile it must be noted that considerable difficulty has arisen in regard to native rights held within the territory of the older grantees, particularly the palm concessions of the Lomami Company and the *Huileries du Congo Belge*. The absence of a defined boundary between native and Company land led to constant charges of trespass by natives when collecting fruit. By an arrangement made in the Lomami concession the whole land has been left *en indivision* until a definite demarcation can be made as between the Company and the natives, the latter being meanwhile free to collect fruit anywhere, but under an obligation to sell it

¹ *Codes et lois*, p. 1653.

² *Ibid.*, p. 1649.

all to the Company. The agreement concluded with the *Huileries du Congo Belge* is more complicated. In each of the five blocks chosen by the Company, an area not greater than the total estimated to be free of native rights has been developed *en indivision*; in this area natives may move freely and establish habitations where they choose, till any land is appropriated by the Company for plantation, when it is marked off and fenced; after this natives are excluded from it; within the rest they may gather palm fruit as they please, but must sell it to the Company. Both here and in the Lomami Concession the price of the fruit is fixed by government. The final delimitation of land was to begin in May 1936, when the natives were to receive a total area equivalent to that calculated as requisite for their needs at the time the contract was concluded. In 1934, however, it was decided that the operation could not be carried out within the prescribed period, and demarcation is deferred until 1944.

(r) *Ruanda-Urundi*

In what is now the mandated territory of Ruanda-Urundi the German Imperial Decree of November 26, 1895, claimed for the Crown complete ownership of the land; a local Land Commission was to decide what lands were unoccupied and therefore available for grant by the state to Europeans. Direct grant from the state was the only means by which freehold could be obtained; land might be leased from natives, but the period was limited to five years. At the same time, Europeans could themselves arrange directly with natives to vacate their land on payment of compensation, and when the state was satisfied that this had been paid it was prepared to give a freehold grant. Actually, the German alienations here were few; when the Belgians examined the matter in 1930 they only admitted titles in 1,558 hectares. The Belgian Government was for some time chary of allowing any alienation of land to non-natives; at the outset it made provision only for leases up to five and then ten years, increasing this to twenty years in 1925; the chief demands for land up to this time were for mission stations. In 1927 it put in force a Congo Decree of September 14, 1886, which makes the validity of sales by natives dependent on the sanction of the administration, and forbids any measure which

would result in their expulsion from land in their occupation or deprive them directly or indirectly of means of subsistence. The Decree of June 3, 1906, has not been extended to this area, but the Decree of October 6, 1930, which regulates the inquiry to be made before land is alienated, is in force. The policy has always been one of caution in the appropriation of native lands. There has been no encouragement of a policy of colonization. Out of the total area of 5,320,000 hectares the state has taken over for its own purposes 45,509 hectares, of which 34,500 form part of the *Parc National Albert*; much of the remainder is used for seed farms. It has also reserved 187,000 hectares for a *Parc National de la Kagera*. The decree constituting National Parks preserves the rights of the natives living within the areas.¹ The areas alienated by the state (including the recognition given to German titles) amount in all to 12,192 hectares, of which 9,253 are still on lease; the alienations have been mainly for mission stations, schools, &c.

(s) *The Portuguese Colonies*

Material regarding the practical operation of the land policy of the Portuguese Government is difficult to obtain. The legal position is regulated by a Law of May 9, 1901, which laid down that all land which at that date did not constitute private property in accordance with Portuguese law was state domain. Decrees of 1918 for Moçambique and 1919 for Angola provide for the reservation of certain areas for the exclusive use of the native population, and these lands may not be alienated. Natives are not obliged to reside in these reserves, but may occupy unalienated land outside them, and land in their actual occupation must not be included in grants to Europeans. A decree of 1927 in Angola provided that the area over which the natives were to retain rights was to be calculated as five times that in actual occupation. They cannot be required to leave these areas except on payment of compensation and on a guarantee that an equal area of land will be made available for them in the reserves. Land left uncultivated for more than a year is regarded as vacant. The report of the Survey Department for this territory in 1933 stated that an area of 160,472 hectares was in the hands of natives, 154,556 hectares being tribal reserves, and the remaining

¹ Decree of Nov. 26, 1934, article 4.

5,916 hectares held in individual title. Statistics of the area of native land in Moçambique are not available.

The normal method of land alienation at the present time is by concessions similar to those given in French West Africa—that is to say, temporary grants which are confirmed on the execution of stipulated development conditions. The maximum area of a single concession is 50,000 hectares, but in specified districts the limit is fixed at 10,000 hectares. The approval of the Colonial Minister is required for concessions above an area which varies in different territories from 1,000 to 5,000 hectares;¹ in order to obtain confirmation of title, the concessionaire must spend on improvements two hundred times the price of the land. Concessionaires are exempt from land tax for the first eleven years if the concession is beneficially used, otherwise an additional tax may be imposed; at the end of ten years the state may revoke the whole or part of the concession for failure to develop.

In Angola a project for colonization on a large scale was adopted in 1928. Collective colonies were to be formed by the emigration of whole villages to selected sites which were to be surveyed and prepared for them in advance; the state was also to provide assistance for the colonists in the form of seed, stock, implements, and credits. Owing partly to insufficient preparation and partly to the fact that the economic depression began to be felt almost as soon as the scheme had been set going, it was found to be unduly costly and its abandonment was recommended in 1933.² In Moçambique rights over a considerable part of the territory were allotted in the early seventeenth century to individuals who were held to exercise over the native population such powers as had previously been vested in their own chiefs. Various measures increasing the control of the state over these *prazos*, some of which are hundreds of square miles in extent, were introduced in the course of the nineteenth century, and they are now held as concessions for twenty-five years. The holder is obliged to cultivate a stipulated area, and is responsible for the administration of justice and the collection of taxes. Conditions on the *prazos* are subject to inspection on behalf of the administration. A number of them are administered by the

¹ Comte de Penha-Garcia (Editor): *Les colonies portugaises*, 1931, pp. 345 ff.

² *Relatório da Repartição dos Serviços de Cadastro e Colonização*, 1933.

Zambezia and Moçambique Companies, who may alienate them subject to government approval. The proportion of their land alienated by the Moçambique Company is given as 6 per cent.; for the rest of the colony no statistics are published.

(t) *The Legal Basis of Land Alienation*

The diversity of conditions under which land policy has developed in different territories has involved the presentation of a somewhat lengthy statement of fact, and it is not always easy to distinguish the legal theory on which states have acted in claiming the right to make alienations or to control transfers made by natives. Of the categories into which jurists divide the methods of acquisition of territory, both cession (which would include agreements of various types) and conquest are represented in the history of Africa; in no case can the colonial governments base their legal claims on a third process known to international law, that of prescription, or perfection of title by long and undisturbed occupation.¹ The value of many of the agreements under which European powers acquired dominion is debatable; but for the present purpose attention must be directed not to the methods by which sovereignty has come into existence, but to the manner in which it has been manifested in the exercise of control over land.

The exact point at which sovereignty may be said to commence is not always easy to determine; at times it has to be inferred constructively from action taken, rather than from the issue of any formal announcement, which in itself has only the value of a declaration of a state of fact.² Where formal declarations have been made, the procedure has been to announce either annexation or the creation of a protectorate, and though no uncertainty attaches to the implications of the former, some doubt has existed as to the authority implied by the latter. Briefly, it may be said that the British Government at one stage regarded a protectorate as conferring only political control; that was typically the case when it first assumed the protection of Bechuanaland.³ At a later stage it

¹ M. F. Lindley, *op. cit.*, 1926, p. 43.

² *In re Southern Rhodesia* (1919), A.C. 238.

³ See above, pp. 730-2. Cf. *Rex v. Crewe, ex parte Sekgome* (1910), 2 K.B. 576.

evolved the theory of the 'colonial protectorate',¹ which assumed that it was empowered to exercise full sovereign powers, both in relation to land and to other functions, such as the administration of justice; its formal declarations were expressed as Orders in Council issued under the Foreign Jurisdiction Act.² This Act contains a declaration that, however the powers of the Crown might have been acquired, whether by treaty, grant, usage, or other lawful means, its jurisdiction is as ample as if it had been derived from the cession or conquest of territory. But the exact measure in which the British Government put into exercise the powers thus taken depended on the nature of the organization which it encountered in the country where powers were assumed, or on the existence of treaties which, by their character or the circumstances in which they were concluded, were entitled to respect. Thus it has followed different lines in the jurisdiction claimed over Zanzibar, and over the lands of the less politically developed tribes of East Africa; and it made agreements, guaranteeing respect for certain of the natives' traditional rights, with the Basuto, Barotse, and Buganda, which it did not find possible to conclude with some of the other Central or East African chiefs.

When once sovereignty has been established, the juridical position becomes sufficiently clear; in the absence of any enactment by the sovereign power having the force of law, the rights of the state in regard to land are deemed in law to be regulated by the general principles of law relating to the powers of a Sovereign on the acquisition of territory; but at any stage the Sovereign can by legal enactment take such powers over land as it deems equitable or expedient. In that case, it is clear that no previous agreement, and no custom in regard to land, can affect the validity of its order; ethical or political considerations may influence its action, but its legal competence is complete. The Privy Council report in the Southern Rhodesia case made it clear that a simple declaration, by means of an Order in Council or otherwise, would have rendered unnecessary the legal investigation into the position of the state in regard to the ownership of the lands in the colony;³ again, it was

¹ Cf. A. B. Keith, *The Governments of the British Empire*, 1935, chap. viii.

² Foreign Jurisdiction Act, 1890, 53 & 54 Vict., c. 37.

³ See above, p. 734.

the fact that the sovereign power had declared its position in regard to the land that put the Kikuyu claimants out of court in the case to which reference has been made.¹

As just stated, when no such declaration has been made, or enactment passed having the form of law, the rights of the state are deemed to be regulated by the principles of law relating to the powers of a Sovereign on a change of sovereignty; in regard to the land, these are expressed in the formula that privately owned property remains unaffected by the transfer unless and until the new Sovereign brings about some alteration in its conditions by its municipal law.² But the application of that principle encounters certain difficulties. The rule is one of those principles of international law which 'rest on the consensus of civilized states': the jurist has always had some trouble in applying it to regions where there is an unfamiliar conception of sovereignty and property; thus in Africa he has not found it easy to attach the attributes of private property to the class of rights existing under native customary law in communally held lands. It is not only the jurist who has suffered from this difficulty; its influence is seen throughout the earlier attempts to establish land policy on a legal basis. If the administrations which felt the need to gain control over land had encountered organizations whose system of tenure was capable of adaptation to their own purposes, which necessarily included the transfer of lands in some form of title suited to modern economic conditions, they might, like the British in India, have been content to regulate their proceedings under native law, or some modification of it; but the prevailing custom in Africa differed so far from the form which property rights have assumed in Europe that this was impossible. That some of the early administrations appeared to take little cognizance of African land custom was not due merely to ignorance of its nature, though certainly there were many misconceptions on the subject; it was due to the fact that at the outset their efforts were directed towards securing powers over the land which could be utilized for their own purposes, and these powers were necessarily such as could be interpreted in terms of European law. They looked, therefore, in the

¹ See above, pp. 747-8.

² See *Amodu Tijani v. The Secretary, Southern Nigeria* (1921), 2 A.C. 399.

first instance, for characteristic evidence of rights of ownership, such, for instance, as might be found in the existence of individual holdings and the capacity to encumber or alienate. The authority which a chief possesses to dispose of tribal lands is, at best, undefined in African custom; and it is now generally accepted that it could seldom, if ever, be held to include the power of outright disposal, since a transfer of this nature was in itself alien to African custom. But his power to dispose of lands was an assumption which, whatever its justification in African law, was a convenience to those who sought to gain rights in the land, of a type which European conceptions of law could recognize; and agreements which, in one form or another, implied or could be taken to imply that chiefs had disposed of the lands under their control, were widely relied on as the basis of the powers over land which administrations found it necessary to acquire.

The practical difficulties of the administrator had their analogy in the juristic field. The concern of the subject people could, no doubt, be summed up in the simple question whether the administration had power to deprive them of their land, which they held on tenures customary to themselves, but of a type unrecognized in the law of the colonizing power. To the latter, the practical issue was whether it had power to take up native lands and convey them to others in some form of recognizable title. In the absence of any enactment having the force of law, the courts could only decide these issues by reference to the nature of the authority over land which was implied in a transfer of sovereignty. The British tribunals set themselves to inquire, in the first place, for evidence of the existence of private rights which a new Sovereign would, on the ordinary principles of law, be obliged to respect, and found the best material for a decision on this point in a consideration of the nature of the relations between the tribesman holding a right of occupation in tribal lands and the native authority who had a traditional right of distribution of such lands. To the African, accustomed only to his traditional conceptions of land tenure,¹ there may seem to be little direct relevance in the question whether 'the usufructuary right of the tribesman' constituted 'a mere qualification of a burden on the radical or final title

¹ See below, pp. 829-36.

of whoever is sovereign',¹ or alternatively, whether 'a communal usufructuary occupation may be so complete as to reduce any radical right in the Sovereign to one which only extends to comparatively limited rights of administrative interference';² but these were the only considerations on which, in the circumstances, the issue then before the courts could be decided. The apparent conflict between the decisions in the Southern Rhodesian and Southern Nigerian cases³ was due not to any variation in the principles followed by the Privy Council, but to the difference which, in its view, existed in the relations between tribesmen and chiefs in the two countries.⁴ Great, however, as is the juristic interest of these judgements, it is now mainly historical, since the position of the state has in each case subsequently been made clear by legislation, and questions regarding the authority of the state over land will in future turn on the interpretation of the law in force. For the French courts the problem has been narrower in scope;⁵ they have in each case been bound by statutes defining the position of the state, and their difficulty has arisen from the fact that, inheriting the traditions of Roman law, they have been unable to recognize that the right of property could exist in a collective form.

The legal form which was adopted by different states in defining the nature of their rights over land was in most cases dictated by circumstances rather than by principle. The immediate need was the rapid development of resources, and views on land questions were largely influenced by the theory held as to the most appropriate means to this end. In some areas it seemed likely to be best achieved by the establishment of a permanent white population, in others, such as French Equatorial Africa, by securing through capitalistic exploitation as large a quantity as possible of exportable products, while there were other territories where the greatest possibilities of development appeared to lie in the activity of the native population itself. Physical conditions and material opportunities accordingly had a larger share in the determination

¹ *Sobhuza v. Miller*, II (1926), A.C. 518.

² *Amodu Tijani v. The Secretary, Southern Nigeria* (1921), 2 A.C. 399.

³ See above, pp. 733 and 769.

⁴ See, for a somewhat different analysis, E. C. Wade, 'Act of State in English Law: Its relation with International Law', *British Year Book of International Law*, 1934, p. 98.

⁵ See above, pp. 782 ff.

of policy than ethical or legal considerations of the rights of natives in their lands. Even where there was a genuine desire to respect native rights, and such cases are not wanting, the form of legislation tended to be affected by the difficulty, to which reference has already been made, of combining a definition of rights in terms known to European law, with a recognition of the customary system of land rights prevailing in Africa. Policy has accordingly expressed itself in a diversity of legal forms. But in truth the precise form used by any state in claiming rights for itself, or in recognizing those of natives, has not been the factor of primary importance. So far as the native is concerned, the crucial fact is not the manner in which the law is framed, but the spirit in which effect is given to it. As the previous pages will have shown, the effect of a law professing to restrict the right of the state to the disposal of vacant lands varies according to the interpretation which practice places on 'vacancy';¹ on the other hand, an outright assertion of full state proprietorship over all lands² may, in spite of its apparent disregard for native rights, prove, when rightly used, to be the best machinery for protecting natives in the enjoyment of their lands. Again, the concession by the state of the claim that all land is, in some form or other, the subject of native rights, may be detrimental to natives themselves, if the state carries its respect for their rights to the extent of refraining from legislation to secure control over alienations to Europeans or 'stranger' natives.³ It is important that a study should be undertaken, on much more comprehensive lines than has been possible here, of the action taken by different African administrations in regard to land; but the important chapters of that study will deal less with the legal and juristic aspects of the rights which governments have asserted, than with the economic and social consequence of the uses to which they have put these rights.

(u) *The Reserve Policy*

In the British territories the consequences of the alienation of lands are most conspicuous in the areas where the reserve policy has been adopted—namely, the Union, the Rhodesias, and Kenya;

¹ See above, pp. 784 ff. and 790 ff.

² See above, pp. 763 ff. and 773-4.

³ See below, p. 855.

they are to some extent also seen in Nyasaland, but in other British territories alienation has had relatively less effect on native life. The principle of possessory segregation, in its fullest form, has two objectives: the reservation of lands for European occupation, and the eventual exclusion of the native from European lands, save for his employment as wage-earner or tenant labourer. Segregation¹ may be said to be in full operation in the sense that the limits of European and native areas respectively have now been fixed; the measure of segregation effected, however, does not amount to a complete territorial separation, since the holdings of the two communities are in most cases intermingled. In the Union it is only the Transkei Territories and part of Zululand which can be said to constitute homogeneous native blocks; in Southern Rhodesia,² though there are some large blocks of native land, a number of reserves are interspersed in European areas; the highlands of Kenya, on the other hand, constitute a more or less homogeneous European block. In its second aspect this theory is not yet in complete operation; steps taken to remove the 'squatter' have advanced further in the Union than elsewhere,³ but it is clear that both in the Rhodesias and Kenya the policy of removing the squatter must be subjected to some considerable delay in execution.

The reserve policy may be viewed from two standpoints: its efficacy for achieving the purposes for which it was designed, and its effect on native life. In the Union the policy of curtailing the area of native lands received, at the outset, considerable support from farmers and later from industrial employers, who held that to limit the land available for native subsistence would increase the labour supply. It is clear that the system must have given employers a larger body of labour and on lower terms than would have been possible had natives been allowed to retain large areas for their subsistence. Further, there is from the employers' point of view the substantial advantage that the reserve serves as a 'shock absorber' in the sense that it provides for the unemployed, the infirm, and the aged without any charge on the state. While allowing this to be the fact, it is not easy to measure the degree to

¹ See above, pp. 721 ff.

² See above, pp. 724-5.

³ See above, pp. 732-8.

which the curtailment of the area available for native occupation is responsible in modern conditions for increasing the supply of labour. In Chapter XI figures have been given showing the extent of the exodus of wage earners from the reserves, but it is clear, as has there been shown,¹ that factors other than the restriction of land now operate to produce this movement: the most striking illustration can be found in Bechuanaland, where there is a considerable annual exodus though the areas of land in native occupation have not been curtailed; again, the migration from Northern Rhodesia and Nyasaland is due to general economic conditions rather than shortage of land.

South Africa. Opinion in the Union now tends to lay emphasis on the existence of the reserves as a factor in the policy of social segregation, rather than on the influence it may exert on the supply of labour. That policy does not assume that there shall be no contact between the native and the European; when over one million and a quarter natives are occupied within the industrial system of the Union, there can be no question of the complete segregation of the two communities, and the practical objective is to make as full a use as possible of the native wage earner in the lower paid ranks of European employment, while allowing him to develop to the full, within the native areas, the opportunities which they offer to him for rising in the scale of economic life, as farmer, professional man, or craftsman.² The policy which regards the reserves as the appropriate field within which the native is to work out his economic and social advancement is perhaps in some quarters merely a doctrine of expediency; there can be no reason to doubt that in others it represents a genuine belief that the native can in this manner secure for himself the best position available to him under the conditions introduced by a dominant white civilization. The difficulty which an observer must feel in regard to this aspect of the reserve policy lies in the evidence of the limited possibilities which the reserves offer for any substantial improvement in the conditions of those who are resident in them.

¹ Pp. 648-9.

² General Hertzog, *House of Assembly Debates*, vol. xxvii, 1936, c. 4086; G. H. Nicholls, in an address to the Durban Joint Council of European and Natives, *The Natal Witness*, August 15, 1935.

In some of the reserves there is marked congestion:¹ the density in the Transkeian Territories as a whole has been officially estimated as 58.1 per square mile; in the Ciskei it is 57.15; but in certain parts it is higher, being as high as 70.1 in the Kingwilliamstown District; it must be noted, in addition, that large areas in the Transkei are hill or ravine. The density in Zululand is 33.70, and in the rest of Natal, 48.19 per square mile, as against 20.3 for the Union as a whole. Figures of density, however, are of limited value as evidence; their relevance depends on the type of rural economy practised in the area to which they refer. In the course of the inquiries which followed the Land Act of 1913, the Eastern Transvaal Local Committee calculated that a minimum of 38½ acres per family was required; the Glen Grey Act of 1894 allowed 8 acres per holding for arable, besides grazing, the proportion assigned to grazing being 70 per cent. of the whole location. But estimates of this kind break down when applied to areas including wide differences of soil and climate; the best testimony of the condition of the Union reserves is that to be found in the report of the Native Economic Commission,² which made a personal examination of them. In point of rainfall and quality of land they are not, in the view of the Commission, inferior to the average land in the Union. Nevertheless, the report states that, in the reserves, 'with few exceptions, the carrying capacity of the soil for both human beings and animals is definitely on the down-grade; a state of affairs which, unless soon remedied, will within one, or at the outside two decades, create in the Union an appalling problem of native poverty'. Some of the areas are already far from self-supporting, and it has been estimated that the native population as a whole (including, of course, those in the towns) consumes 8,000,000 bags of maize more than natives produce.³ It has to be realized that the pressure on the reserves will, in normal circumstances, be increased with the pursuance of the measures against squatting; it has been calculated that they may eventually result in a return of at least 120,000 natives to the reserves.⁴ Again, the most casual observation of the

¹ See Chap. I, p. 2.

² *Report*, U.G. 22, 1932, paras. 69, 250-349.

³ J. F. W. Grosskopf, 'Die Plek van die Bantoe-bevolking in die Suid-Afrikaanse Volkshuishouding', *The South African Journal of Economics*, vol. i, 1933, p. 459. Cf. W. H. Macmillan, *Complex South Africa*, 1932, chap. xi.

⁴ *Race Relations*, vol. ii, no. 4, 1935, p. 8.

Union reserves demonstrates the grave injury done to the soil by erosion.¹

The need for an extension of the reserve area was recognized by the Native Economic Commission, and the enactment of the Native Trust and Land Act of 1936² shows that there is now a general acceptance of the statement made by General Smuts³ in 1929, that 'the mistake we made in South Africa in the past was our failure in not securing sufficient land for the future needs of the rapidly increasing natives; and the land problem that we have in consequence on our hands is one of the most difficult'. But while the addition of the 'released' area of 15,344,000 acres contemplated in the Act of 1936 will eventually improve the situation, it is clear that the problem is not merely the result of insufficiency of land. There is an urgent need for expenditure on anti-erosion work, the improvement of systems of water-storage, and on the extension of agricultural instruction, with a view to the substitution of more intensive cultivation for stock-raising. Until recent years the question had not received serious attention from the Union Government, and for the most part such expenditure as was incurred was provided by the native councils. As is shown elsewhere,⁴ the Transkei and Pondoland Councils were responsible for the foundation of the Tsolo, Teko, and Flagstaff agricultural schools, largely with the aim of educating native demonstrators; the expenditure of the United Transkeian Territories General Council on agricultural schools and farms during the twenty-two years ending June 30, 1935, amounted to £319,566. The councils maintain a Director of Agriculture for their own area, and also provide considerable sums for dipping operations and for anti-erosion work, fencing, dams, and tanks; the expenditure on dipping between 1903 and 1935 amounted to £635,058, and on the other services to £671,241.

The assistance received from the Union Government in the period 1910-34 for development in reserves was limited to a grant of £49,000 from loan funds and £346,000 from revenue for fencing and dipping-tanks, together with a sum of £228,821 for land purchases. But the attention directed to the condition of the

¹ See Chap. XVI, p. 1083.

² See above, p. 724.

³ *Africa and Some World Problems*, 1930, p. 60.

⁴ Chap. IX, p. 355, and Chap. XVI, pp. 1079 ff.

reserves by the Native Economic Commission in 1930 and 1931 led to a change of policy; the government authorized expenditure from the Native Development Fund¹ on agricultural instruction, and from 1930 to 1935 the general account of the Fund provided £88,444 for this purpose, and has been responsible for the maintenance of the agricultural school at Fort Cox, started in 1930. The Native Affairs Department has also spent certain sums from general revenues on measures against erosion, including the provision of dams; it has appointed a Controller of Native Settlements, a Director of Native Agriculture, with four Deputy or Assistant Directors, and a Senior Departmental Engineer with eight engineers under him. It has built up a large field staff both on the agricultural and on the engineering side to deal with conditions in the reserves and in the 'released' areas.

The passing of the Land Act of 1936 was marked by a further advance in the position of government; the statement² issued by the Native Affairs Department in 1937, after referring to the 'appalling' condition of the reserves, emphasized the urgency of measures for their rehabilitation, and announced that a detailed survey was being undertaken for this purpose. The expenditure so far undertaken by the Union Government on the reserves admittedly bears no comparison with the large direct and indirect outlay (estimated to amount to over £100,000,000 from loan votes and revenue between 1910 and 1936)³ on assistance to European farm interests; the evidence of a growing measure of recognition of native needs is all the more to be welcomed. That there is a wide field for improvement is obvious; but at the same time it must be realized that the reserves, even under improved conditions, must be subject to the limitations which apply to the general agricultural conditions in the Union. There are large areas suitable only for the raising of cattle or sheep; this, in the soil and climatic conditions of the Union, demands extensive grazing grounds; and the productivity of the arable areas is low, as compared, at all events, with the better lands of Southern Rhodesia or Kenya. Improvement of the reserves will undoubtedly improve the native

¹ See Chap. IX, p. 369.

² *Statement of Land Policy under the Native Trust and Land Act, 1936.*

³ S. H. Frankel, *Capital Investment in Africa, 1938*, p. 120.

standards of living; but it remains to be seen whether the reserves can ever offer those opportunities for social development which some advocates of the policy of segregation seem to have envisaged.

Southern Rhodesia. In Southern Rhodesia the effect of alienation has been less marked than in the Union. The density of the population in some forty reserves was estimated in 1935 to vary from $2\frac{1}{2}$ to 60 per square mile, the average for the combined areas being 20 to the square mile; it has been estimated that here the economic size of holdings should range from 10 to 50 or 60 acres per head of the native population.¹ While the provision made is more liberal than in the Union, there is nevertheless evidence of deterioration in some of the reserves; the annual reports refer to the fact that they contain less arable than was expected, and that certain areas have begun to be characterized by conditions of overgrazing, worn-out land, and loss of top soil. Importance accordingly attaches to the policy initiated of 'centralizing' arable and grazing lands, already said to be yielding good results, and to the provision of agricultural demonstrators,² and the increase of water facilities.³ It is clear, also, that more energetic efforts are required to deal with tsetse fly in certain of the reserved areas. Though the acreage under cultivation is estimated at 1,388,892 acres, the yield is at present of a low standard and, as experience of the system of demonstration plots has shown, is clearly capable of improvement. The expenditure on the reserves in 1935-6 amounted to £8,936, with £6,485 from Native Funds, but in the year 1936-7 the sum of £22,000 was voted for water-supplies and soil conservation in native reserves; and a staff of two European Agriculturists, a Forest Officer, a Soil Erosion Officer, a Water Conservation Officer, two Land Inspectors, and ninety-two Native Agricultural Demonstrators are engaged in general development work in the reserves. Although up to 1937 expenditure for these purposes has amounted to £138,154,⁴ it would still appear to be inadequate in view of the needs which official reports disclose.

Northern Rhodesia. In Northern Rhodesia the movement of natives into the reserves, which has been in progress for some years, is not completed, and conditions are not yet fully stabilized.

¹ A. C. Jennings, op. cit., p. 303.

² See Chap. XV, p. 1039.

³ See Chap. XVI, p. 1087.

⁴ See Chap. XVI, p. 1087.

Although the Land Commissions,¹ in allocating the reserves, took into consideration the future needs of the tribes, the circumstances in which they were delimited have led to unequal results; the density of population was given in 1931 as 6.89 in the railway area reserves, 8.5 in the Tanganyika province, 38.7 in the North Charterland Concession, 16.0 in the eastern and 12.0 in the western part of Barotseland. It was admitted in 1930 that some of the reserves had already proved too small, and that there were large areas alienated to Europeans in which no development was taking place.² Not only are some of the reserves congested, but as a result soil conditions have deteriorated; there are some, such as those in the Broken Hill area, where natives have to rent land for grazing outside the reserves; it was remarked in 1936 that in some of the reserves near the copperbelt the land would shortly become useless unless the area was extended, or natives allowed to move elsewhere, and Sir Alan Pim in 1938 stated that additional areas were required.

The inequality of distribution to which these facts point is, as the discussions which took place on the subject in Nyasaland emphasized, one of the inevitable consequences of the reserve system, which permanently fixes tribal areas, and makes no provision for changes in the population or in economic development. In the circumstances of Northern Rhodesia much should be gained by the adoption of the more elastic system now under consideration,³ which would permit, as in Nyasaland, of a redistribution of areas, subject, however, to the guarantees given to tribes when the reserves were first constituted, that they would not be moved without their own consent. Meanwhile, it is clear that the chief need of the reserves is the development of their water-supplies;⁴ a number of dams and wells were constructed in the years 1930-3, but the programme contemplated by the local administration has been curtailed for financial reasons. The budget of 1935 provided a sum of £1,907 for this purpose, but a larger outlay is obviously required. There has been little improvement of methods of cultivation in the reserves and there appears to be a need for the extension of agricultural instruction. Sir Alan Pim in 1938

¹ See above, p. 740.

² *Governor's Address to the Legislative Council*, 1930.

³ See above, p. 741.

⁴ See Chap. XV, p. 1041.

recommended a comprehensive programme of rehabilitation and control of methods of cultivation as well as carefully planned measures for water conservation, and the provision of additional supplies, based on a technical survey.¹

Kenya. As has already been remarked, the effects of alienation in Kenya are local rather than general. While the density of population in the Masai reserve is only three per square mile, the three districts of Kikuyu have a density of 283, and the three Kavirondo reserves an average density of 145; there is one area in North Kavirondo (Bunyoro) which exhibits the exceptional figure of 1,140 per square mile. But in Kenya, where there is great variety of climatic and soil conditions, the density in the reserves is only one of the factors which have to be taken into consideration in judging the effects of alienation. It is probable, indeed, that the greater part of the population must always have been concentrated in the area near Lake Victoria now held by the Kavirondo, and in the central regions occupied by the Kikuyu and related tribes and by the Kamba; these groups number to-day 2,230,192, and the balance of the population—namely 782,229—is distributed over a large number of tribes, including those on the coast. Again, though the European occupation of the highlands may have curtailed the possibilities of expansion by the Kavirondo, one of the most densely settled tribes, their own lands were not reduced by this process, save for very small areas acquired for public, missionary, or trading purposes. It is more important to note the prevailing conditions of the reserves. The reports of the Agricultural Commission, presided over by Sir Daniel Hall,² and of the Land Commission of 1933,³ make it clear that in certain areas there is already a dangerous degree of soil deterioration,⁴ mainly attributable to overstocking; the latter Commission held that, unless this process were stayed, some of the reserves would be irretrievably ruined, and the inhabitants reduced to a state bordering on starvation. Overstocking must be understood in the sense not only that more cattle are put on the land than the supply of grazing warrants, but that the cattle are of little economic value

¹ *Report*, op. cit., Colonial 145, 1938, p. 74.

² *Report of the Kenya Agricultural Commission*, 1929.

³ *Report*, op. cit., Cmd. 4556, 1934, Part III, chap. i and x.

⁴ See Chap. XVI, p. 1098.

to their owners. There were, however, in the view of the Commission great variations in the extent of the mischief; while, for instance, in certain reserves, such as the Kamasia, the condition of the grazing land was found to be deplorable, there were others in which deterioration was said to be far less marked; and it was considered by the Commission that, in many cases, the unsatisfactory conditions were the result of maldistribution rather than of shortage of land.

The problem is admittedly one of great complexity. Any measure which proposes to make possible a redistribution of the reserve lands in proportion to the needs of the different tribes would encounter objections based on the fact that certain of them, such as the Masai, have been guaranteed the exclusive use of their lands, and that land in such reserves cannot be granted to other natives without the consent of the tribal representatives. The history of the Kenya reserves has been such that it might well prove undesirable now to revive mistrust in the intention of government by suggesting any extensive measure of redistribution or change of boundaries. In discussing possible extensions of area, the Land Commission of 1932 was doubtless influenced by what it regarded as commitments made to Europeans in respect of the highlands,¹ but it also had reason to feel that, apart from any question of right, an extension of area would not necessarily form a solution for the problem of the reserves. Writing in 1914, Sir H. Belfield² held that the 'natives' pernicious pastoral proclivities' should not be encouraged by the grant of more land for grazing purposes. That, perhaps, was an extreme view which did not take into account the position occupied by cattle in the life of the native; but if the Commission is right in attributing the deterioration in the reserves to overstocking, an extension of area might prove only a temporary palliative; the immediate necessity is to reduce overstocking by judicious use of culling and other methods,³ to protect the soil by the introduction of rotational grazing, and to substitute, where soil and climatic conditions permit, and with due respect to the requirements of native custom, an agricultural for a pastoral economy.⁴ It may well be argued that until a serious

¹ See above, pp. 749-53.

² Dispatch to the Secretary of State, Apr. 3, 1914.

³ See Chap. XVI, p. 1095.

⁴ See Chap. XVI, p. 1096.

effort has been made in this direction, the addition of new areas, at all events in the case of certain of the reserves, would produce no permanent improvement. The Agricultural Department which, at the outset, paid little attention to the needs of natives, extended its organization between 1923 and 1929 in order to deal more fully with questions affecting them, and has of recent years undertaken a programme of work designed for the improvement of conditions in the reserves,¹ and in 1937 obtained a grant of £34,000 from the Colonial Development Fund in connexion with the reconditioning of the Ukamba reserve.² Until it has been seen how far this programme can be made generally effective, no final judgement appears possible as to the results produced by the present distribution of land; but it is also true that the state of some of the reserves renders the pursuit of these measures one of the most pressing obligations of the administration.³

Other Territories. In Nyasaland, where some 5 per cent. of the total area has been alienated,⁴ the main problem lies in the adjustment of the status of the large number of natives who are resident on the European farms in certain districts. The reserve policy has not been adopted either here or in any of the other British dependencies in Africa. In the Belgian Congo the concessions extending over large areas of land have so far resulted in a relatively small measure of actual dispossession, and it remains to be seen how far the present policy will lead to a more direct measure of control over the lands lying within the areas conceded for occupation by Europeans or for cultivation under the plantation system. Physical and climatic conditions will necessarily restrict the former, and it is, indeed, mainly in the area under the management of the *Comité du Kivu* that it is favoured by suitable conditions. On the other hand, the value of large-scale plantations for oil-palm or coffee, as compared with systems of native production, remains to be tested in the light of a longer experience than has hitherto been available. In the French colonies the effect of alienation is likely to be confined to certain parts of the Ivory Coast or French Guinea, though it

¹ See Chap. XV, p. 1042, and Chap. XVI, p. 1096.

² See Chap. XVI, p. 1098.

³ *Report of the Commission on the Financial Position and System of Taxation of Kenya*, Colonial 116, 1936, paras. 242 and 254.

⁴ See above, p. 756.

may be noted that even here grants are as a rule small in extent. In the French Cameroons, on the other hand, the administration has already begun to recognize the need for delimiting areas in which further concessions for plantations cannot be allowed, and there is every indication that the process needs to be extended.

(v) *European Land Settlement*

It is obvious that in some territories, as for instance the colonies on the West Coast, alienation must be viewed mainly in its economic aspect; the justification for the withdrawal of land from native occupation is to be measured by the relative contribution made to general welfare, either directly, by the greater production of the alienated lands and the employment given to wage-earners, or indirectly, by the increase in native production from the adoption of improved processes introduced by European management. But in territories such as South Africa or Southern Rhodesia policy has a social as well as an economic objective. Even were it to be demonstrated that there would be an economic advantage in devoting to native production some of the areas now reserved for Europeans, or that by restoring a part of the alienated land to natives their value as consumers would be so enhanced as to benefit the population as a whole, the argument would not be decisive; it would meet the reply that a reduction of the European area would militate against the policy which regards it as essential to maintain a resident European community at a certain level both in regard to numbers and standards of living. It is, nevertheless, of interest to examine some of the economic aspects of the procedure adopted by the countries mentioned in making alienations of land.

South Africa. In this respect the land policy of South Africa appears to be marked by three stages. The original grants of land were not made on any definite plan; in the earlier days the areas given on the coast proper were comparatively small, but as trekking extended settlers were allowed to occupy a 'half-hour radius' area, which was taken at a normal standard of 3,000 morgen or approximately 6,000 acres; there was no survey available, and under the *leenings-plaats* system¹ no title-deeds were given, land

¹ W. M. Macmillan, *op. cit.*, 1927, p. 84.

being held without fee on a theoretical one-year lease, which was converted into quit-rent tenure under Cradock's Proclamation of 1813. Many of these holdings were subjected to subdivision under the Roman-Dutch law of inheritance; but there were at the same time many instances, especially in the drier areas suitable for sheep-breeding, where larger areas were accumulated in single hands, farms ranging from 10,000 to 20,000 acres being not uncommon. The size of holdings and the nature of the tenure were determined by the political circumstances under which settlement took place, and by the requirements of the pastoral economy then prevailing; but land had not yet acquired a negotiable value and was sought mainly by those who required it for their own occupation.

A new factor was introduced in the Transvaal by the growth of the gold industry. Land became an object of speculation, and large areas were acquired by companies either from the state, or by purchase from farmers whose interests had been diverted from stock-raising to transport-riding or other occupations connected with the mines. A second stage may be said to have been initiated by the scheme of reconstruction adopted after the Boer War; economic conditions had broken down in the Transvaal and part of the Free State, and for the first time steps were taken to secure a more systematic development of the lands available. The Crown Lands Disposal Ordinance and the Settlers Ordinance of 1902 created a Land Department in the Transvaal, which had at its disposal about 29,000,000 acres of Crown land, but of this 19,000,000 acres were unsurveyed and all the area was imperfectly developed.

A Land Board was set up in 1907 to manage settlement in the Orange Free State, mainly under the Land Settlement Ordinance of 1902. It was part of Lord Milner's policy to attract settlers from outside; an important feature in this policy was the grant of state assistance to new settlers for development purposes, while the returning farmers were assisted by the new Land Bank created in 1908.¹ As was pointed out, however, by the Transvaal Indigency Commission of 1906-8,² there was in reality a wider problem involved; the farm system had already become uneconomic, and a readjustment was required both in the system of tenure and the

¹ The provincial Land Banks were merged into the Land and Agricultural Bank of South Africa in 1912.

² *Report*, T.G. 13, 1908, p. 95.

methods of agriculture in order to secure a more beneficial use of the land. The Milner Land Settlement schemes in the Transvaal and Free State had a limited result; the holdings given were small as judged by former standards, being only between 300 and 500 acres in extent, and altogether only about 1,000 settlers were working under the scheme at the time of Union. But the scheme formed the basis of the measures which characterized the third stage of development, the closer settlement policy introduced by the Land Settlement Act, passed by the Union Government in 1912.

The Transvaal Indigency Commission had recommended, among other measures, that a more beneficial use of the large areas held by farmers and companies should be secured by a graduated tax on unimproved land values. But proposals for land taxation have never been acceptable in South Africa. Whereas the pre-Union statutes had been confined to operations on Crown lands, the Act of 1912, under sections 10 and 11 respectively, provided for closer settlement by the purchase and re-allotment of land by the state, and for the purchase of specified farms at the request of individual applicants. The objective was in part economic, but the policy was also largely influenced by the desire to provide for the growing body of Europeans of South African origin, many of them of the poor white class, whom changes in the system of agriculture or the subdivision of older holdings had deprived of employment on the land. A considerable expenditure was involved, not only in the repurchase by the state of large areas of alienated land, but in the grant of an increased measure of assistance to those settling on it.

The policy did not necessarily exclude immigration; indeed, immigration has been stated to be integral to the welfare of the country, and considerable numbers of immigrant settlers are received annually. It would seem that one organization, the 1820 Memorial Settlers' Association, was responsible for the introduction of 7,000 settlers in the period 1911-35. From the date of Union up to 1935 the state had allotted an area of 35,022,230 acres to 17,889 persons, the valuation placed on the land allotted being £13,908,204. Of the total allotted, the greater portion—namely, 19,737,130 acres—was obtained by purchase under the two alternative systems provided by sections 10 and 11 of the Act of 1912, only 6,975,340 acres

being allotted under the Transvaal Crown Land Disposal Ordinance of 1903. It is not easy to judge from the figures published how far the action taken under these measures has been effective in promoting closer settlement. In 1935 there were 54,944 farms of less than 500 morgen (1,058 acres) occupying 21,701,000 acres, and 44,322 farms of over 500 morgen occupying 188,106,000 acres; thus about 90 per cent. of the total alienated area of 209,807,000 acres is held by about 45 per cent. of the owners.¹ These figures, however, include the extensive areas still held by land companies in the Transvaal and the owners of large sheep farms in the dry areas.

The expenditure incurred on land settlement proceedings has been analysed in the report of the Settlers Relief Commission, 1934.² By a series of amendments to the Land Settlement Act of 1912, ending with No. 57 of 1934, the amount advanced by government for the purchase of land has been increased to nine-tenths of the price, leaving only one-tenth to be found by the settler; the obligations in regard to beneficial occupation have been gradually reduced, and the arrears of the debt owed by settlers to the state have twice been capitalized, with the result of a substantial write-off on each occasion. The sums actually written off up to March 31, 1934, amounted to £1,619,049, and the total capital debt to be recovered had grown to £7,500,000, while the settlers, less than three years after the second capitalization, and in spite of assistance provided by numerous relief measures, were again in arrears to the extent of £724,000. In view of the course taken in the past in regard to these liabilities, and of the present political conditions in the Union, the major part of these arrears must clearly be regarded as irrecoverable. An amending Act 25 of 1931 enabled the majority of lessees to postpone the repayment of the purchase price until 1965, their obligation being confined to the payment of 4 per cent. per annum on the capital debt; Act 57 of 1934, however, restored for new lessees the principle of purchase price redemption during a period of forty years. It must further be noted that the above sums are independent of the large assistance given to farmers through the Land and Agricultural Bank, or otherwise.

¹ *Official Year Book of the Union of South Africa*, 1934-5, pp. 377, 478.

² U.G. 25, 1935.

It is not necessary at this point to examine in greater detail the course taken by the land settlement policy; it is clear, however, that from the first, policy has not made it possible either to impose an effective tax on land or to insist on the adoption of more intensive methods of farming. The cost of the settlement policy has been increased by the fact that land was frequently purchased by the state at an uneconomic figure, and by remissions of arrears necessitated by unusual conditions, such as drought or locusts. But there is perhaps no state in the world which has been able to allow purely economic consideration to outweigh the claims of social schemes which have strong political support, and the land policy of the Union is pre-eminently a scheme of this nature.

Southern Rhodesia. In Southern Rhodesia the British South Africa Company disposed of extensive areas of land to companies and to members of the pioneer and police forces; the latter grants were made in recognition of services rendered, and no purchase price was paid, but the holder was liable to an annual quit-rent. In the case of other early alienations the general terms were a purchase price of 1s. 6d. per morgen in Mashonaland and 3s. in Matabeleland, with a quit-rent of £3 per 1,500 morgen (3,000 acres), and 4s. for every additional 100 morgen. The titles usually contained a 'beneficial occupation' clause, which could be eliminated if the grantee, or a European substitute, occupied the land for a period of three years and erected buildings to the value of £200. The Land Occupation Conditions Ordinance of 1900 allowed the holder to obtain exemption from the occupation condition by paying an annual fine for ten years; and, under Government Notice of November 13, 1903, individuals or companies holding land upon occupation tenure could, by surrendering one-third of their holdings, obtain title to the remainder free of the condition of occupation. In terms of this notice, which was withdrawn in 1905, a total area of 374,245 morgen reverted to the category of unalienated land. The British South Africa Company selected large estates for farming on its own account, including the Rhodesdale (1,000,000 acres) and Nuanetsi (2,500,000 acres) for stock-raising, the Marandellas (35,000 acres) for tobacco planting, and the Sinoia (60,000 acres) and Primer (9,000 acres) for citrus. In 1909 an area of 800,000 acres was granted to the Oxo and Lemco Companies for cattle farming. In 1914,

of an estimated area of 59,000,000 acres situated 3,500 feet or more above sea-level, the region considered suitable for European occupation, about 32 per cent. had been alienated, and 27 per cent. was reserved for native occupation. For marketing purposes the most desirable lands, comprising some 33,000,000 acres, lay within a zone of twenty-five miles from the railway line; of this area, 50 per cent. had been alienated, and 24 per cent. was reserved for the natives. It was recognized at an early stage that a large number of farms were too big to be developed by the holders with the capital at their disposal; in 1913 legislation was introduced to place a tax on unimproved land, and to establish a Land Settlement Board with power to acquire undeveloped land, primarily in the twenty-five mile zone, at a price fixed by compulsory arbitration. The Bill, however, was abandoned.¹

Land settlement schemes were not organized until after the War, when a small number of ex-soldiers acquired farms on special terms; the government also took advantage of the terms offered by the Empire Settlement Act of 1922, and introduced various assisted schemes, under which 205 settlers took up land in the period 1925-31, of whom 142 were still on the land at December 31, 1931. Of the expenditure involved, half was borne by the British Government. The 1931 census showed that 4,325 Europeans, or 8.67 per cent. of the white population, were engaged in agriculture. Although the production of maize and tobacco and the rearing of cattle have been developed steadily, the proportion of the occupied European population engaged in agriculture is substantially less than that in the Union, and the slow rate at which settlement has taken place is expressive of the difficulties encountered by the farming community since the first outbreak of rinderpest in 1896.

The Rhodesia Land Bank Limited was formed by the British South Africa Company in 1912; loans amounting to £155,288 in respect of farm mortgages were described in 1933 as being to a considerable extent 'frozen' capital, which would be realized only when conditions improved in the industry. Soon after the grant of responsible government, a State Land and Agricultural Bank was established under the Land Bank Act, 1924, with an initial

¹ S. H. Frankel, *op. cit.*, chap. iv.

capital of £300,000, subsequently increased to £970,000. At the end of 1935 the amount owing to the Bank was £982,243, of which £828,706 represented mortgage loans and £42,881 interest due and payable. The Bank, furthermore, administers special funds placed with it by government for assisting applicants who are unable to obtain relief under the Land Bank Act; at the end of 1935 these loans amounted to £124,380. A committee appointed in 1934 to inquire into the position of the agricultural industry reported¹ that, while it was not possible to ascertain the exact financial position of the farming community, there could be no doubt that comparatively few farmers were solvent at the existing market value of their assets; much of the land was heavily encumbered with mortgage, and farm areas were excessive in extent.

Kenya. It has been mentioned that at the outset the encouragement of European settlement in Kenya was in large part due to the desire to establish in the vicinity of the railway line a population that would provide sufficient traffic to repay the heavy outlay on its construction.² In the early stages the home government attached minor importance to the national character of this population, as is shown by the fact that in 1903 it proposed to make a free grant of some 5,000 square miles to the Zionist Organization.³ The desire to attract colonists accounted for the repeal of the Land Regulations of 1897, which permitted only short-term leases (twenty-one years) with stringent development conditions, and for the provision for grants in freehold under the Crown Lands Ordinance of 1902; the first freehold grants were of homesteads of 160 acres, to which a pre-empted area of 480 acres was added on payment at the rate of two rupees per acre, and the fulfilment of prescribed conditions of development. In 1903 and the following years, free grants were offered of agricultural land in lots of 640 acres, and of stock-farms of 5,000 acres. In addition, larger areas were leased on easy terms, the most conspicuous being 320,000 acres of grazing land near Naivasha taken up by the East African Syndicate, 100,000 acres adjoining them which formed Lord Delamere's original estate, and the Grogan Forest Concession of 200,000 acres. In 1905 East African Estates Limited obtained a

¹ *Report*, C.S.R. 16, 1934, paras. 7, 272.

² See above, p. 745.

³ See above, p. 743.

ninety-nine years' lease of 200,000 acres on the coast, and 100,000 acres in the Teita District; by a readjustment in 1925, the area leased on the coast was reduced to 100,000 acres in consideration of the grant of additional areas elsewhere. The maximum lease remained at twenty-one years till the Crown Lands Ordinance of 1915 extended the period to 999 years. By that time, however, the period of alienation of land in large blocks had come to an end. One further large-scale settlement plan was launched in 1919, when a total area of 4,560 square miles was offered to discharged soldiers in 257 small farms of 160 acres, free of purchase, and 1,053 larger blocks for purchase on easy terms.¹ Except for grants made under this scheme, no land has been allotted in freehold since 1912, and since that time no large-scale alienations have been made, though the total area alienated increases slightly from year to year.

By the end of 1935, 6,768,000 acres had been alienated. No detailed figures regarding the state of development of this land have been published since 1934. At that time the total alienated was 6,543,360 acres; of this, 1,405,036 acres were unoccupied. The remaining 5,138,324 acres were held by 2,027 occupiers, giving an average of 2,534 acres per occupier. The area 'developed' was officially estimated at 1,410 acres per head, being 274 acres under cultivation, and 1,136 under stock. The total cultivation was thus 556,182 acres or 11 per cent. of the whole, having fallen from 643,644 acres in 1930. Reference has already been made to the discussions which took place between 1904 and 1915 on the subject of reducing land speculation, and the efforts made to secure a more beneficial use of the large areas alienated. In 1908 the Colonial Office proposed the imposition of a surtax on large holdings,² but in view of local opposition the proposal was abandoned in 1913, and has not since been revived.

State assistance to agriculture has in Kenya taken the form of protective duties, favourable railway rates for exports, and the exemption from customs duty of agricultural machinery. Of recent years the problem of agricultural indebtedness has been a serious one. The total agricultural debt of the colony at the end of 1932 was estimated by the Agricultural Department to be between

¹ *Annual Report*, 1919-20; see also W. MacGregor Ross, *Kenya from Within*, 1927, p. 81.

² *Op. cit.*, Cmd. 4117, p. 30, 1928; *op. cit.*, Cmd. 2629, 1926.; see also above, p. 746.

£4,000,000 and £5,000,000.¹ Since the depression of 1929 a number of special relief measures have been introduced. In 1929-30 reduction of railway rates on cereals was made to a total of £98,000, and rebates on maize amounted to £15,071. In 1930 a special loan to maize exporters was authorized by Ordinance 17: the amount outstanding in 1935 was £116,090. In 1930, also, an Agricultural Advances Board was created for the purpose of making advances to farmers in difficulties: its functions were taken over in 1934 by the Land and Agricultural Bank, established in 1931. In 1936 the amounts originally fixed as the limit of advances were raised: the maximum advance for the discharge of an onerous mortgage was increased to £3,500, and the maximum for general purposes to £5,000; advances up to £200 were authorized for anti-erosion work. By the end of that year £631,260 had been advanced in long-term loans, of which £45,160 had been repaid, and £13,825 in short-term loans, of which £2,165 had been recovered. Of the total advanced in long-term loans, £282,907 were devoted to the discharge of existing mortgages. The total sum advanced under the Agricultural Advances Scheme was £139,646, of which £22,735 had been written off and £30,440 recovered. An Agricultural Mortgages Relief Ordinance of 1934 imposed a moratorium on mortgages for two years; in 1936 this was extended for another year, and the Governor was empowered to make further extensions. In 1935 a committee was appointed to recommend measures to lighten the burden of agricultural indebtedness, and as a result of its proposals a Farmers' Conciliation Board was established by Ordinance 18 of 1936, which is empowered to make advances to farms threatened with bankruptcy, the funds being placed at its disposal by the Land Bank.²

(w) *The Control of Alienation*

The preceding pages have been devoted mainly to a study of the methods followed by states in obtaining land for public purposes, or for alienation to non-natives, and attention has naturally concentrated on those territories in which a policy of colonization has

¹ *Kenya Land Commission, Evidence and Memoranda*, vol. iii, Colonial 91, 1934, p. 3075.

² For the general question of expenditure on agriculture, see S. H. Frankel, *op. cit.*, chap. iv.

created large demands on the state for the provision of lands. In other areas, such for instance as the British or French colonies in West Africa, alienation to non-natives may now be said to present problems of administrative detail rather than of general policy; unless some change of circumstances, of a type which cannot now be foreseen, creates an interest in colonization, their governments are not likely to be faced with the demand for the assignment of large tracts of land for Europeans. There is a party in Belgium which favours a policy of colonization in the Kivu area of the Congo, but it still remains to be seen if its scheme can be carried into execution. On the whole it seems probable that the future of non-native enterprise, at any rate in these territories, lies in commercial and industrial enterprises, or in mining, or plantations of limited size, developments none of which necessitate alienation of land on an extensive scale. The relative advantages of the plantation system and of native peasant production need not be discussed here; it is necessary here to refer only to the problems which will arise when policy recognizes the need for providing land for purposes such as those indicated. Though in most territories there are considerable areas which are sparsely populated, and in which accordingly it might be possible to satisfy demands of this nature without serious disturbance of native life, it is nevertheless necessary to safeguard existing native rights and to provide adequate relief when they are disturbed.

Two different situations have to be considered. The first and most common is that arising in areas where the state claims rights over all land, as for instance in the northern provinces of Nigeria, or over all 'vacant' lands, as under the French and Belgian systems, or again, where it retains in its own hands the legal ownership of lands in the native reserves. In these circumstances natives cannot normally invoke judicial processes to prevent the alienation of their land to non-natives.¹ This position is the legal consequence of the assumption by the state of ultimate proprietorship; the safeguards for the preservation of such rights as individual natives may possess *vis-à-vis* the state lie in the administrative regulations controlling the procedure to be observed before native lands can be alienated, or in legal provisions, such as those existing in Kenya,

¹ For exception see the Tanganyika Law quoted on p. 824.

placing a statutory body in control of alienation from the reserves. In these circumstances the decision as between the state and native rightholders must remain in the hands of the executive, and the nature of the process by which the rights of occupiers of lands are determined becomes of first importance, the more so as experience has shown that in the past too little importance has been attached to such rights as those of occasional occupation, which is a regular incident of the system of shifting cultivation, or of grazing, or of access to water facilities. In South Africa regulations under the Native Trust and Land Act of 1936¹ define the conditions subject to which sites in the reserves may be alienated for missionary, educational, or trading purposes, and provision is made in the Act for the appointment of local boards, one member of which may be a native, to advise upon the acquisition and alienation of the land vested in the Trust. In Southern Rhodesia no native reserve or any portion thereof can be alienated without the permission of the Secretary of State, but it has to be borne in mind that this provision does not, of course, extend to mineral rights, which are owned by the Southern Rhodesian Government.

The Kenya Native Lands Trust Ordinance, 1930, constitutes a Central Board, to include where possible native membership and local advisory boards. Rights over land in a reserve² cannot be alienated without the consent of the Central Board following a reference to the appropriate local board and consultation with the native community; in certain cases, where there is local native objection, or where the proposed term exceeds ninety-nine years, the sanction of the Secretary of State is necessary. In Tanganyika the consent of the native authority must be obtained to alienations of land occupied by natives within its area,³ and a somewhat unusual provision is made for instituting legal proceedings if the executive's right to dispose of land is disputed.⁴ In Northern Nigeria the procedure is for the district administration to investigate and report upon any native rights that may exist in respect of land for which a non-native desires to obtain a right of occupancy,

¹ See above, pp. 722-5.

² *Ibid.*, pp. 751 ff.

³ *Land Development Survey Second Report, 1930, Iringa Province*, para. 12.

⁴ *Laws*, cap. 68, sect. 22.

and ascertain whether other land is available which is satisfactory to the occupiers, and the amount of compensation due.¹ It has been seen that in the Belgian Congo the law now prescribes that an independent assessor or a judicial officer should be associated in the inquiry, which is necessary before sanction can be given to a sale by a native to a non-native, and that a similar procedure has been adopted in the mandated territory of Ruanda-Urundi.

In making state alienations to non-natives the tendency in the British colonies has been to limit the grant to a leasehold tenure; thus though in Kenya the term of 999 years' leasehold is still maintained for agricultural land, the maximum term for town plots is ninety-nine years, and rents are revisable in 1945 and for each subsequent period of thirty years, with a maximum of 3 per cent. on the unimproved value.² In Nyasaland³ and Uganda,⁴ while sale is still legally permissible, the ordinary procedure is to give a lease up to ninety-nine years, with periodic revision of rental; in Tanganyika,⁵ Northern Nigeria,⁶ the Northern Territories of the Gold Coast,⁷ only a leasehold tenure is given, the period here also being up to ninety-nine years, with periodic revisions of rental. In most cases the conditions provide for proof of beneficial occupation; thus to take a typical instance, Tanganyika prescribes that for areas of over 300 acres of agricultural land, improvements to the value of £300, plus 4s. per acre for every acre over 300 acres, must be effected within the first three years, and additional improvements of half that value within the first five years. In Nigeria the usual conditions in agricultural leases require the lessee to bring at least two-thirds of the cultivable area under cultivation at the rate of one-eighth of the area each year.⁸ In the French territories a provisional title is given on an annual rental during a period of two to five years, which is made 'definitive' in the form of freehold title over the part of the area which has been developed, when the conditions as to beneficial occupation and purchase price are

¹ F. D. Lugard, *Political Memoranda*, 1913-18-19, p. 385.

² *Laws*, cap. 140. See above, pp. 746 ff. ³ Crown Lands Ordinance, 1931.

⁴ Crown Lands Ordinance, 1903. ⁵ *Laws*, cap. 68. ⁶ *Laws*, cap. 85.

⁷ Land and Native Rights Ordinance, 1931.

⁸ *Revision of Instructions to Political Officers on Subjects chiefly Political and Administrative*, 1918, p. 368.

satisfied.¹ In French Equatorial Africa, if the land is abandoned for two consecutive years during the preliminary period, the concession may be cancelled. Concessions in the Belgian Congo may take the form of ninety-nine-year leases, the state reserving the right to take back undeveloped land at intervals of ten years,² or the land may be disposed of by sale or on fifteen-year leases, preceded in each case by a preliminary period of five years, during which developments must be undertaken according to a special standard.³

The policy on which the procedure now followed in British colonies is based has been the subject of much discussion by the different interests concerned. Government, on the one hand, has sought to limit the extent of permanent alienation to non-natives, and at the same time to gain for the state part of the incremental value in the land accruing from the growth of an organized economic and political system;⁴ on the other hand, as will have been seen,⁵ settler interests in Kenya objected at one time that a leasehold tenure of ninety-nine years afforded insufficient security for the investment of capital. The commercial interests which at one time sought concessions for palm-oil plantations in Nigeria rejected as inadequate the terms then proposed,⁶ namely, sixty years for building and twenty-one years for agricultural areas. Alienations intended to make provision for the permanent settlement of a European community must necessarily differ in their terms from concessions made for commercial development. In the former case, freehold or an extended term of leasehold is required, though it would still seem appropriate for the state to insist on reasonable terms of beneficial occupation, and to take its share of increased incremental values either by periodic revision of rental, in the case of extended leasehold, or land tax, or a tax on transfers in the case of freehold alienations. The leasehold tenure, with a maximum of ninety-nine years, now in force in British territories such as Nyasaland, Tanganyika, or the northern provinces of Nigeria, which do not look primarily to a colonizing policy,

¹ See, for example, *arrêts* of Sept. 13, 1926, and Oct. 18, 1928, French Equatorial Africa; *arrêt* of May 13, 1927, Senegal.

² *Arrêté royal* of May 30, 1922.

³ *Arrêté royal* of Dec. 3, 1923.

⁴ See Cmd. 4117, 1908, p. 30.

⁵ See above, pp. 746 ff.

⁶ *Report of the Northern Nigeria Lands Committee*, Cmd. 5102, 1910.

appears to confer a title adequate for commercial or 'plantation' development.

An entirely different situation arises where, as in Basutoland or Swaziland, lands have been left in native control, or where, as in the Gold Coast, the state has claimed for itself no rights in land, on the ground that there is no area over which native rights do not exist. Here acquisition by non-natives takes the form of private purchase, and various measures have been adopted in the British territories to exercise control over such transactions. Thus in Basutoland¹ and Bechuanaland,² land rights may not be alienated without the government's consent; in Buganda, the Land Laws of 1904 and 1908 require the consent of the Lukiko and Governor, and in the Gold Coast³ and Sierra Leone,⁴ transfers are supervised by Concessions Courts. Throughout the British areas, therefore, the sale of land by natives to non-natives has been brought under some form of control. As has been seen, that exercised through Concessions Courts, constituted on a judicial basis, has proved least effective; questions regarding the boundaries of a chief's authority, or regarding his power to alienate tribal land, are matters more suitable for executive than judicial decision. In the French⁵ and Belgian⁶ territories, sales by natives to non-natives have also been brought under control. In the French areas, however, this does not extend to lands held by natives in freehold under the process of *immatriculation*;⁷ further, the stipulation that previous administrative sanction must be obtained is chiefly designed to protect the rights of the state in the *domaine public*. The Belgian law, in addition to safeguarding the position of the state, provides more adequate safeguards for assessing the value of the property and establishing the equity of the bargain.

While provisions of this class have originated in the necessity for obtaining control over the sale of lands by natives to Europeans, they have another aspect, as providing some means of regulating the transfer of land to alien natives. The question is at present of importance mainly in the coastal districts of West Africa, since in

¹ See above, p. 729.

² Ibid., p. 731.

³ Ibid., p. 777.

⁴ Ibid., p. 781.

⁵ Decree of Oct. 23, 1904, French West Africa.

⁶ Decree of June 3, 1906, Ordonances of Sept. 30, 1922, and Oct. 6, 1930, *Codes et lois du Congo belge*, 1934, pp. 1646, 1653.

⁷ See below, pp. 858-62.

areas where the Crown retains the superior ownership it can regulate the transfer of rights by natives of the territory to alien natives. These powers have been utilized in the northern provinces of Nigeria to declare that there is no restriction on transfer between blood relations; the consent of a district headman is necessary for transfer to a non-related native of the same district, and that of an administrative officer for transfer to a native not resident in the district.¹ In the areas where the Crown does not claim over-proprietorship there is not the same means of controlling transfers, and sales to alien natives, particularly if they are money-lenders or speculators, may, with the growth of the conditions which give a negotiable value to land, constitute a danger to the structure of land-holding native groups. Indeed, in the Gold Coast injurious results have already followed the extensive alienation of cacao lands in the forest areas to natives of the non-forest areas. In the division of Akun Abuakwa, for instance, the inhabitants of neighbouring divisions have gradually acquired ownership of half of the Akun Abuakwa territory. Sales have often been negotiated in the Gold Coast by subordinate chiefs without reference to their head chiefs, and have resulted in continuous litigation between chiefs to establish their rights of sale.

A further problem has been created by disputes between the head chiefs as to the right of jurisdiction, it being maintained that the right of jurisdiction passes with the sale of land, a view supported by certain judgements of the Supreme Courts. This vexed question occasions friction and even riots, and it seems that only an executive order delimiting the respective spheres of jurisdiction will provide a solution. Experience may show the necessity of making some legal provision for a right of pre-emption in favour of the members of the landholding group, similar to those embodied in the pre-emption laws of some provinces in India, or, alternatively, of giving a somewhat narrower scope to the definitions of 'native' now appearing in some of the laws regulating the ownership of land. It is of interest to note that, according to the definition of the Kenya and Tanganyika Ordinances, a native means 'a native of Africa, not of European or Asiatic origin, and

¹ *Laws*, cap. 85, Third Schedule.

includes a Somali or Swahili';¹ while the definition in the Nyasaland Order in Council of 1936 is 'a native of the Protectorate not being of European or Asiatic race or origin'. In the southern provinces of Nigeria an alien is any person who is not a native of Nigeria;² in the northern provinces of Nigeria a native means a person whose ancestors were members of any tribe indigenous to the northern provinces,³ and a similar provision applies in the northern territories of the Gold Coast;⁴ in Sierra Leone the definition of native includes 'persons of African birth who are entitled by native customs to rights in land in the colony or Protectorate'.⁵

II. PRIVATE RIGHTS IN LAND

(a) *Native Land Tenure*

A different series of problems has now to be considered, connected not with the use by states of their powers of control over land, but with the evolution of native land custom in response to new economic conditions. The regulation of such matters as the inheritance of land, or the distribution of vacant land when required for fresh cultivation, has for the most part remained within the field of native customary law, and it is only in certain areas, such as the Gold Coast, that it has been to any extent brought within the orbit of the judicial courts acting under statutory law. But questions now tend more and more to emerge in which the administration has to concern itself. Disputes over rights in land come up increasingly on appeal or revision from native courts,⁶ and as a result there is gradually being evolved in different areas a case law supplementing or modifying local custom regarding land. Special processes, either executive or semi-judicial, as, for instance, the reference to the judicial committee of the provincial councils in the Gold Coast, are being adopted to define the boundaries of the jurisdiction exercised by chiefs, and special problems are arising in some of the British areas from the fact that native authorities are being given powers to make rules defining

¹ The Resident Native Labourers' Ordinance, 1925, Kenya; *Laws of Tanganyika*, cap. 68.

² *Laws*, cap. 89.

³ *Laws*, cap. 85.

⁴ Land and Native Rights Ordinance, 1931.

⁵ Concessions Ordinance, 1931.

⁶ For the system of appeals from native courts, see Chap. VII, p. 287.

custom,¹ which have in some cases already resulted in modifying the native custom regarding land. A typical case is the series of rules made by the native authority in the Bukoba district of Tanganyika regarding the *nyarubanja* tenures. In some areas land custom is changing rapidly under the influence of new conditions, such as the increase of the pressure of population or the spread of a market economy. These changes will eventually involve official intervention, both legislative and executive, in a more direct form than has hitherto been contemplated; the need must, for example, be envisaged for the definition and recording of title, for the regulation of lease or tenancy conditions, and for limiting the right to raise credit on land. Problems of this class have already begun to emerge in certain areas, but they are likely in future to become of more general interest and of greater urgency.

The customs which regulate the use of land in Africa are of great diversity, and generalizations are perhaps apt to be more misleading here than in any other field. The effects of physical and economic environment write themselves more readily on land custom than on any other form of social observance, and not only is there great variety of such environment in Africa, but the ebb and flow of migration has tended to prevent the stabilization of custom in regard to land. We have now not merely the variety of land-holding custom incidental to the different uses to which land is put, such, for instance, as the collection of forest produce, pasturage, cultivation as an aid to animal husbandry, or cultivation as a primary industry, but we are beginning to see new varieties of custom created by the growth of more intensive systems of cultivation, and by the fact that, in some areas at least, land is beginning to acquire a commercial value. There are, however, certain common features which seem to be fundamental to most customary systems of land tenure in Africa. Rights to land have the character of a privilege based on membership of a community, entitling every member to the beneficial use of the community lands, whether for grazing, hunting, collecting fruits, or cultivating, rather than of a right over specific areas identified with the holder.

¹ See, for instance, the Native Law Ordinance, *Laws of Uganda*, cap. 62; and Chap. IX, pp. 391, 429.

In the simpler African societies the claim for land for a house, and for cultivation and grazing of stock, is founded on the membership of a kindred group, a clan or subdivision of a clan, whose ancestors are believed to have been the first occupiers of the common lands. The heads of the group are responsible for the allocation of the land, and sometimes also for the religious ceremonies necessary to secure the blessings of ancestors on crops and herds. Among the nomad Bushmen each family has its own hunting ground and the penalty for intrusion might be death at the hands of the traditional right-holders. Where population is sparse and whole villages move as the soil becomes exhausted, land rights take the form of a recognition that a given tract of land is at the disposal of each village group; land allocated to different families by heads of groups remains in their undisturbed possession so long as they make beneficial use of it. The produce of the land is the exclusive possession of the family cultivating it. These conditions still prevail, for instance, among tribes such as those of northern Nyasaland, Northern Rhodesia, the southern part of the Belgian Congo, or tribes in northern Uganda.

Where conditions are more stable, and the village site is more or less permanent, and where cultivation, even when the shifting system is followed, is carried on within an area never altogether abandoned, allotments of land to family units are more definite; they are now made so far as possible on a scale which will permit of the polygamous family extending its cultivation as the number of wives increases, and of allowing married sons to set up house on their father's land. The land allotted passes normally by inheritance, under a variety of well established but often complex systems. Where the allotment has not made sufficient provision for the next generation, some members must in turn apply for land to the group heads, who have the right to resume and re-allot land once cleared which has gone out of cultivation. As the density of population increases and the area of virgin soil grows less, the number of persons who have new land to administer naturally grows smaller and smaller. This describes generally the position among such tribes as the Chaga of Tanganyika, the Kikuyu and Kavirondo of Kenya, the Thonga of Portuguese East Africa, the Tswana of the Bechuanaland Protectorate, or many of

the tribes of the southern provinces of Nigeria or on the French West Coast.

An important variation of these conditions supervenes when a centralized political authority is developed. The evolution of such an authority is not universal; in many parts of Africa the normal landholding aggregate is still the kinship group, and the authority controlling the use of land lies within the clan; but where chiefdoms exercising effective authority over wider areas have been established, they have tended to encroach on the rights of heads of kinship groups in the disposal of lands. That process, for instance, went far among the Chaga, and among the Ganda, where clan ownership tended to retain little more than a religious or traditional significance. The power of the chief as the ultimate authority over land was strongly marked in those parts of British and French West Africa which came under Islamic influences,¹ as well as in areas such as Dahomey, Benin, or Ashanti. It has been noted, for instance, that in Dikwa, in the British Cameroons, there are three conceptions of land tenure coexisting, due to successive waves of immigration, the last in order representing the political influence of the ruling emir.² References given in previous pages to Swaziland³ and Basutoland⁴ will illustrate the extent of the authority which the paramount chiefs acquired in dealing with questions relating to the disposal of land. The fact that in numerous cases the growth of political organization placed the final authority over land in other hands than those of kindred or group representatives has had a marked significance in the history of Africa. As has been shown,⁵ it was assumed to be the basis of the authority on which chiefs acted in making treaties or agreements with Europeans, and these agreements, though often intended by the chiefs to concede only political control, were in practice frequently treated by the recipients as ceding actual ownership of tribal lands.

The nature of the power which chiefs may have possessed under African custom to cede tribal lands to non-natives has frequently been debated; it is not a question to which it is

¹ See Chap. IX, p. 417.

² *Report to the League of Nations on the Cameroons*, 1924, appendix iii.

³ See above, pp. 729 ff.

⁴ *Ibid.*, pp. 728 ff.

⁵ *Ibid.*, p. 801.

easy to give a precise answer or one of general application. Moslem law, evolved in more complex conditions than those of Bantu Africa, made provision for the sale and transfer of property, and the ruler of a Moslem state had a position which would enable him to claim the right to dispose of lands on behalf of the state. On a strict interpretation of the Moslem law, the emirs of the northern provinces of Nigeria or Lake Chad might be held to have this power, but as has already been observed, the Moslem law relating to property, if ever applying in full force, was progressively modified to meet the local custom of the conquered people. Even in Moslem states, therefore, the right of the chief to dispose of lands occupied by his subjects may be open to some question: in non-Moslem Africa the circumstances in which an alienation of tribal lands could be contemplated had never arisen before the days of European penetration, so that in the absence of actual cases which could constitute a native custom, the attribution to chiefs of the power to sell tribal lands could only be a matter of inference. The agreements under which such lands were ceded to European governments dealt with conditions which in almost every case were outside the experience of the chiefs who made them, and their implications must usually have been beyond the power of their makers to envisage. Save, however, where these agreements have still the value of a treaty, as in the case of Basutoland, Barotseland, or Buganda, the conditions in which they were made, and the interpretations subsequently placed on them, are now mainly of historic interest, since the authority of the chief to transfer lands to non-natives has been brought under a control which now places on the administration the responsibility of interpreting its extent and supervising its use. It still remains of importance, however, in regard to the disposal of land to natives, and reference has been made in a previous part of this chapter to some of the problems arising from its exercise.¹

It is usual to speak of the customary land system of Africa as collective or communal, and it is convenient to retain these terms, subject to an appreciation of the limits within which they apply. Some distinction may legitimately be drawn between the collective idea and its expression in a system of landholding. It is true to

¹ See above, pp. 801-2.

say that throughout that part of Africa with which we are concerned there is a prevailing conception of the land as the collective possession of the tribe or group, reinforced in many cases by religious beliefs which ascribe the fertility of the soil and the general prosperity of the inhabitants to the influence of the ancestral spirits with whom the land is associated. Through such beliefs, and through traditions which base the collective claim to tribal lands on the settlement of their first ancestors under a mythical chief, the land may be said to represent the past as well as the future of the tribe; as has been said of the Ashanti, the 'land laws of to-day appear but the logical outcome of a belief which, in the not very remote past, considered the living landowners as but holding as it were tenancies at will from the dead, and as being the trustees of the latter'.¹ The intense antagonism which has been evinced by the native peoples of the Gold Coast to any proposal to modify the customary system has been ascribed to the strength of this religious feeling; though it may be noted that such feelings have not deterred the chiefs of this region from making concessions on a largescale. Elsewhere it has presented difficulties when equivalent land is offered in compensation to the native occupiers of land required for alienation; in their eyes no other land can be equivalent to that in which their essential religious beliefs are centred. It is, however, necessary to remark that this attitude is not universal: there are tribes whose occupation of their present territory is of relatively recent date, who preserve their link with the ancestors through hearth-stones or other relics carried with them on their migrations. Among nomadic herdsmen it is naturally absent.

Viewed as a type of land tenure, the element of collectivity shows itself mainly in the existence of the privilege of occupying lands hitherto undistributed but within the general control of the community; though the lands occupied by a unit, such as a family, are seldom demarcated (and, indeed, could hardly be demarcated in cases where the shifting system of cultivation prevails), their limits are known and respected, and possession is seldom disturbed so long as the occupation is in any sense effective. The community has no claim on the produce of the soil, other than the well-recognized right to hospitality or of assistance at times of scarcity or the

¹ R. S. Rattray, *Ashanti*, 1923, p. 216.

like. Even though the chief, in areas where centralized political institutions have developed, may have the right to evict a subject for misconduct or disloyalty, this is in effect only one aspect of a recognized political penalty; in many cases, indeed, the penalty might take the form of driving a man out of the community while leaving the land to his heirs. In practice, therefore, a reasonable security of tenure existed, if only because a chief, or his dependent sub-chief, has usually been anxious to retain or increase his following; if there has been insecurity, it has been due to the relations between chief and tribesmen in the matter of tribal obligations, and has not been of the nature of the insecurity of a tenant subject to a landlord under conditions of competitive rental. All the incidents of the system are those attaching to conditions in which the supply of land normally exceeds the demand, and where cultivation is in large measure of the 'extensive' type.

There can in former times have been few cases where the formation of land custom came under the influence of the opposite situation, that, namely, in which there is such density of population as to create pressure on the soil; the only large blocks marked by such density were in the region of Lake Victoria, certain areas in Northern and Southern Nigeria, and the Gold Coast; there were smaller examples of this type in the volcanic lands of Kili-manjaro or among the Gishu on the western slopes of Mount Elgon, and in the coastal areas of British and French West Africa. But even where there was pressure on the soil, land cannot have acquired a negotiable value, so long as husbandry conformed mainly to the conditions of a subsistence economy, and there was no regular system of marketing of crops. There is, it is true, evidence that a tribe or group frequently made arrangements to admit outsiders to their lands; such arrangements have been described in detail among the Chaga, Kamba, Haya, the Yakö, and Kikuyu.¹ Though gifts of some kind were given on admission, these transactions did not amount in any sense to sale of lands; they signalized rather the affiliation of the new-comer to the land-owning group, and as soon as a shortage began to be felt, the feeling that the land was the inalienable property of the group led to a reassertion by its members of their hereditary claims.

¹ For studies on these tribes see below, pp. 838-40.

An instance of the alienation of land by one tribe to another before the advent of the Europeans is that of the grant of two large tracts of land by the Wabena to the Ngoni; the transfer of rights was made for defensive reasons, and did not imply the submission of the Ngoni to the Wabena chief.¹ Again, within the group itself there has been in some areas a recognized custom of 'pledging' of land, which presents some resemblance to a possessory mortgage. The evidence of this custom is, as would be expected, strongest in areas where density is greatest. By this custom the creditor has the use of the land until the debt is paid; but here again the central conception which lies behind the affiliation process still prevails; the pledger and his kindred do not lose the equity of redemption. It is an accepted axiom, in the words of the Kikuyu saying, that 'a debt on land can never be finished'.² A pledge of which circumstances have prevented the redemption may constructively amount to sale; the basic principle, however, is that of a redeemable pledge; indeed, the persistence of the right of redemption has in modern conditions frequently been pleaded as a defence against the recognition of sale when transactions, having all the appearance of complete transfers, have come before the European courts, and it has furnished the chief ground on which native opinion has argued the invalidity of the agreements made by chiefs for the surrender of land to non-natives. The conception would appear to have been strong enough to resist even the influence of Koranic law.³ Even in the cases (which, as will be seen, are not numerous) where the right of transfer seems to have gained some recognition, there are certain types of family land which are for religious reasons held to be inalienable, and in some areas special formalities have been required before a transfer can be recognized.⁴

(b) *Studies of Land Tenure*

Over the larger part of Africa these basic conceptions still regulate the customary tenure of lands, though they may be sub-

¹ A. T. and G. M. Culwick, *Ubena of the Rivers*, 1935, p. 242.

² *Report*, op. cit., Cmd. 4556, 1934, para. 276. Cf. J. M. Sarbah, *Fanti Customary Laws*, 1904, p. 86.

³ L. Geismar, *Recueil des coutumes civiles des races du Sénégal*, 1933, p. 176.

⁴ B. Gutmann, *Recht der Dschagga*, 1926.

ject to local variations due to economic or political conditions. A close study of these customs by administrations is essential to secure the smooth working of the native land system, and governments have in the past admittedly erred in more than one instance for lack of such special knowledge. The reservation of a large area of land for the Buganda king and his chiefs in 1900¹ was an act of political expediency, but the decision that the rights granted over it should take a form which was practically that of freehold produced untoward consequences, not merely by overlooking the existence of clan rights in the soil, but, even more important, by neglecting to realize its inevitable effect on the traditional relationship of the peasants to the chiefs. In French Equatorial Africa and the Belgian Congo the governments failed to see that a collective system could give an illusory appearance of 'vacancy' to lands over which, in fact, recognizable rights existed.² In commenting on a study made of the Yoruba land systems, the Governor of Nigeria³ admitted that the failure to study existing land tenures had led to mistakes in the past; a similar admission was made in the official report on the North Kavirondo tenures in Kenya.⁴ The mistakes of the past have arisen mainly in connexion with rights over native land of which the administration desired to take possession, or with legislative measures conferring upon native landholders titles implying rights not sanctioned by native custom. There are now other spheres of action in which difficulties may arise through the absence of adequate information. One example is to be found in the measures being taken for the encouragement of more efficient methods of cultivation. Such measures include, in Tanganyika the creation of model holdings of an economic size, in Southern Rhodesia, of the demarcation of some reserves into fixed areas for grazing and cultivation, in French West Africa, native colonization schemes, and in several territories, systems of rotational grazing. All these measures, if introduced without full knowledge of the rights existing over the land to which they are applied, may create such resentment as would seriously prejudice the proposed improvements. Attempts to investigate the land

¹ See above, p. 760.

² *Ibid.*, pp. 784 ff.

³ Sir Donald Cameron, *A Note on Land Tenure in the Yoruba Provinces*, 1933, para. 15.

⁴ *Report of Committee on Native Land in the North Kavirondo Reserve*, 1931, p. 18.

system of the Ibo led to bloodshed, and are still attended with risk.¹ Special care is needed where land is sought for the settlement of populations transferred from sleeping-sickness areas; to establish within the jurisdiction of a native authority persons belonging to a community whose system of land tenure is different from that locally recognized may lead to political friction.

In the Union the government has initiated no specific inquiry on this subject; the reports of the Natal Native Commission of 1881-2, the Cape Native Laws and Customs Commission 1883-5, and the South African Native Affairs Commission of 1903-5 all contain sections referring to native land custom, but they are not based on special investigations made for the purpose. The anthropological studies made of native life in the Union may be said to have paid more attention to economic conditions than to the details of land tenure;² though there is a careful study of the subject in recent work on the Pondoland native by M. Hunter.³ In the Bechuana-land Protectorate there is a study of land tenure by I. Schapera and G. P. Lestrade.⁴ In Southern Rhodesia no special study is available; in Northern Rhodesia there is much useful information in the reports of the commissions to which reference has been made elsewhere,⁵ but no specific inquiry has been made through government or other agencies. The same is true of Nyasaland. In Tanganyika the land customs of the Chaga have been studied by B. Gutmann⁶ and A. W. M. Griffiths,⁷ who also made a study of the special tenures in Bukoba, and the tenures in Ukerewe Island were described by E. C. Baker;⁸ those of Ubena have been examined by A. T. and G. M. Culwick;⁹ there are notes of the general land custom of the Bantu tribes in Kenya and Tanganyika in a study made by the Hon. C. Dundas.¹⁰ In Kenya, government committees investigated the customs of the Kikuyu¹¹ in 1929, and those in the

¹ M. M. Green, *Ibo Land Tenure in the Village of Umueke Agbaja*, 1938 (unpublished).

² Cf. G. P. Lestrade, 'Some Aspects of the Economic Life of the South African Bantu', *South African Journal of Economics*, vol. ii, no. 4, 1934, pp. 429-30.

³ Monica Hunter, *Reaction to Conquest*, 1936.

⁴ I. Schapera, *Zeitschrift für vergleichende Rechtswissenschaft*, 1936.

⁵ See above, p. 740.

⁶ Op. cit., 1926.

⁷ Unpublished.

⁸ Unpublished.

⁹ Op. cit., 1935.

¹⁰ 'Organization and Laws of some Bantu Tribes in East Africa', *Journal of the Royal Anthropological Institute*, 1915.

¹¹ *Report of Committee on Native Land Tenure in Kikuyu Province*, 1929.

North Kavirondo reserve¹ in 1930: the former is of value, but the second inquiry was limited to the collection of information over a period of about two weeks from representative headmen summoned to meet the committee. In the Uganda Protectorate land tenures formed the subject of an inquiry made by Sir W. M. Carter² in 1906-7, largely by the questionnaire method, and a committee also reported in 1931 on *kibanja* tenure in Bunyoro.³ The land customs of the Lango have been dealt with by J. H. Driberg,⁴ and those of the Ganda by L. P. Mair.⁵

In Northern Nigeria land rights, as has already been mentioned, were examined by a committee in 1910,⁶ and government initiated an inquiry on the subject by means of a questionnaire directed to its officers in 1929.⁷ The *Gazetteers* of the northern provinces published in 1920 contain some treatment of land tenures, but these do not appear to represent the result of specific inquiries; C. K. Meek's *The Northern Tribes of Nigeria* (1925) and *Tribal Studies in Northern Nigeria* (1931) also give some information. For Southern Nigeria some aspects of land rights were investigated by the West Africa Lands Committee of 1912, which was, however, primarily concerned with the questions arising in the Gold Coast; no report was ever published, but the minutes of evidence contain much valuable information on systems of tenure.⁸ The general nature of the land tenures was described in 1910 by C. W. Alexander,⁹ certain specific aspects of rights in Ibadan were inquired into by Sir E. A. Speed in 1916,¹⁰ and a study of the land customs in the Yoruba Provinces was made by H. L. Ward Price in 1932,¹¹ which constitutes, perhaps, the most important contribution to our knowledge of land custom in this part of Africa. Northcote Thomas's study of the Ibo,¹² and C. K. Meek's *Law and Authority in a Nigerian*

¹ Op. cit., 1931.

² *Report on Land Tenure in the Uganda Protectorate*, Colonial, African 844, 1906, and 869, 1907.

³ *Enquiry into Land Tenure and the Kibanja System in Bunyoro, 1931: Report of the Committee*, 1932.

⁴ *The Lango*, 1923.

⁵ L. P. Mair, op. cit., 1934.

⁶ *Report*, op. cit., Cmd. 5102, 1910.

⁷ Unpublished.

⁸ West African Lands Committee, *Minutes of Evidence*, Colonial, African 1047, 1912-14.

⁹ *Memorandum on the Subject of Land Tenure in the Colony and Protectorate of Southern Nigeria*, 1910.

¹⁰ *Report of E. A. Speed*, 1916.

¹¹ *Land Tenure in the Yoruba Provinces*, 1933.

¹² *Anthropological Report on the Ibo-Speaking Peoples of Nigeria*, six vols., 1913-14.

Tribe, 1937, which also deals with the Ibo, give a great deal of useful information. A detailed memorandum on Ibo land tenure in the village of Umueke Agbaja was prepared by Miss Green, a Leverhulme Trust Fellow, in 1938.¹ A detailed analysis of land tenure in one small community (the Yakö) has been made by C. Daryll Forde.² For the Gold Coast a report on *Customs Relating to the Tenure of Land* was issued in 1895; some of the general aspects of the subject are examined in the commentary on the census of 1931,³ and reference to the judicial decisions bearing on land custom is to be found in legal works, such as those of J. R. Danquah⁴ and J. M. Sarbah.⁵ In Sierra Leone the main principles of native law were briefly described by J. C. Maxwell in 1912,⁶ and a study of the Temne was published in 1913 by Esu Biyi.⁷

In the French territories the inquiry made by the Commission of 1915⁸ appears to have been directed mainly to questions bearing on the proposals for modifying the law relating to the alienation of land. The general nature of the native custom in regard to land was analysed by M. Delafosse in a memorandum of 1911,⁹ and is further dealt with in his work on native custom;¹⁰ the land customs of the Agni were described by him with M. Villamur in 1906.¹¹ This tribe is also discussed in two articles by F. Clozel, published in 1901 and 1906. Land custom in the Cameroons is referred to in Tessmann's *Die Pangwe*, 1912. The series of studies of local custom now being undertaken in French West Africa, to which reference is made elsewhere,¹² is designed to embrace inquiries on native land tenures and will make a useful contribution to existing knowledge on the subject.¹³ In the Belgian Congo no inquiry has

¹ M. M. Green, op. cit.

² 'Land and Labour in a Cross River Village', *Geographical Journal*, July 1937.

³ A. W. Cardinall, *The Gold Coast*, 1931.

⁴ *Akan Laws and Customs and the Akim Abuakwa Constitution*, 1928.

⁵ Op. cit., 1904.

⁶ J. C. Maxwell, *Notes on Land Tenure in Sierra Leone Protectorate*, 1922.

⁷ 'Temne Land Tenure', *Journal of the African Society*, July 1913.

⁸ See above, p. 785.

⁹ 'Memorandum on Land Tenure in French West Africa' (tr. by Captain F. H. Ruxton), *Journal of the African Society*, vol. x, 1911, pp. 258-73.

¹⁰ *Enquête sur la famille, la propriété et la justice chez les indigènes des colonies françaises d'Afrique*, 1914.

¹¹ *Les Coutumes Agni*, 1906.

¹² See Chap. II, p. 55.

¹³ See L. Geismar, op. cit., 1933.

yet been instituted by government, but certain studies have been issued, such as those of M. Duchesne,¹ relating to rights in connexion with palm groves, and M. Van der Kerken.² There are also descriptions of land custom contained in more general works,³ and in a legal review published in the territory.⁴

The material on the subject of native land custom may with justice be described as of very unequal value. The specific studies undertaken are, as will have been seen, few in number, and the method adopted has not always been well considered. Inquiry by means of a questionnaire directed to officers or selected chiefs and headmen, though perhaps the only method possible at an early stage of occupation, cannot be expected to provide the knowledge which would now be considered necessary; the tenure of land is intimately connected with social custom and economic conditions, and its real character can only be ascertained by an inquiry sufficiently comprehensive to take into account all the conditions which have determined its development. Experience elsewhere has shown that one of the most effective methods of study is that which takes a sufficient number of plots of land as the basis of inquiry, and by recording all the ascertainable changes in the use of each plot gradually builds up a knowledge of the law which determines the local system of tenures.⁵ That approach has the further advantage that it enables tenures to be described in terms which express African conceptions of land custom and avoids the danger, which appears to be inherent in the system of questionnaires, that inquiry may be directed to ascertain the nature of tenures in the terms of modern European conceptions of land-holding. It is no doubt true that this method of inquiry increases the difficulty of making a logical analysis of principles, such as seems to be desired in some of the French studies on the subject; but it is a difficulty which must be recognized as inevitable in all inquiries into African custom. The information which can be gained from a study of judicial decisions, though by no means

¹ 'Du droit des indigènes sur les palmeraies naturelles', *Bulletin des matières grasses*, 1925.

² 'Le problème des terres vacantes au Congo', *Notre Colonie*, 1919.

³ See the section in *Les sociétés bantoues du Congo belge*, 1926.

⁴ For example, see an article by P. van Aerenbergh in *Bulletin des juridictions indigènes et de droit coutumier congolais*, Jan. 1935

⁵ See also C. K. Meek, *Law and Authority in a Nigerian Tribe*, 1937, p. 344.

without its use, has a limited value in any comprehensive inquiry into land custom; the decision of the native court will no doubt reflect correctly the prevailing sentiment as to the custom by which the issue before it should be decided, but the court is seldom equipped to give a statement of principle; the European court, on the other hand, is largely dependent upon the evidence produced by the parties and the opinion of a selected body of assessors. It would, perhaps, be true to say that judicial proceedings are calculated to afford useful evidence as to the application of custom, rather than the material on which a comprehensive statement of its character can be built up.

(c) *Changes in Land Tenure*

Important, however, as it is that the traditional systems of native land tenure should be adequately studied, it is equally necessary to investigate the changes to which these systems are being subjected by modern conditions. Inquiry into such changes presupposes some knowledge of the traditional systems: without such knowledge, the significance of the changes cannot be fully appreciated.¹ The influences making for change are twofold; first, those due to economic circumstances, such as the increasing pressure of population, new methods of cultivation, or growth of a marketing economy; and second, those due more directly to the action of administrations in introducing forms of tenure based on European conceptions. It is not easy to estimate the relative importance of these factors, but their effect may be illustrated by reference to certain areas where their operation can most readily be recognized.

South Africa. In the Union the customary tenure is still strongly established in the native reserves outside the Cape Province, though modified in some respects in Natal by the operation of regulations, such as those issued under the Native Administration Act of 1927, dealing with the control to be exercised over chiefs and headmen in regard to distribution of land.² There is evidence

¹ The need for a careful study of such changes is emphasized in a paragraph on pp. 7-8 of *A Five Year Plan of Research*, published as Memorandum IX by the International Institute of African Languages and Cultures.

² H. Rogers, *op. cit.*, 1933, pp. 125 ff.

of a tendency in some areas to demarcate family holdings, and also to subdivide them; the Witziesshoek reserve in the Free State appears to afford an extreme example of this process.¹ The Natal Commission of 1881-2 recommended that natives not exempted from native law should be allowed to purchase land on individual freehold tenure,² and the Commission of 1903-5 considered that natives should be given an opportunity of owning land in individual tenure but in demarcated areas only.³ It is, however, only in the Cape Province that the movement for the introduction of individual title has attained real significance. The earliest instance in that province was the settlement in 1849 of the loyal Fingoes in the Smith-Calderwood locations of Victoria East, where individual holdings were allotted on an annual quit rent.⁴ The Cape Native Locations Act of 1879 further extended this principle, and the Native Laws and Customs Commission of 1883 recommended that where natives desired to acquire individual titles in place of their customary rights, these should be conceded. These measures prepared the ground for the Glen Grey Act of 1894, a measure which is as important in the history of the land systems of Africa as it is in that of native administration.⁵

The objective of the Glen Grey Act was wider than the regulation of land settlement, but to many at least of its supporters it represented a genuine contribution to the civilization of the Bantu by extending to him the benefits of individual property.⁶ It provided for the survey of allotments of a standard size of eight acres, the spare land in each location being treated as grazing commonage. The allotments were to be held on a perpetual quit rent, the grant of freehold being avoided in order that the tenure might be subjected to conditions. To preserve the allotment from division, succession was to be by primogeniture as determined by native custom; transfer was made subject to the government's consent, and rights were liable to forfeiture for rebellion, stocktheft, or failure to make beneficial use of the land. The principle of primo-

¹ *Report of the Native Economic Commission, 1930-2*, U.G. 22, 1932, Addendum, para. 28.

² E. H. Brookes, *The History of Native Policy in South Africa*, 1927, p. 70.

³ *Cambridge History*, op. cit., p. 628.

⁴ E. H. Brookes, op. cit. (1924 ed.), pp. 84-9.

⁵ See Chap. IX, p. 352.

⁶ *Report of the South African Native Affairs Commission, 1903-5*, vol. i, pp. 88-9.

geniture was maintained by the Native Administration Act of 1927. The Glen Grey Act was extended to the Transkeian Territories by a series of proclamations commencing in 1898, but in only seven of the twenty-seven districts have lands been surveyed into allotments on the lines contemplated in the original Act. In twenty districts of the Transkei the land is accordingly still held on a modified communal tenure, fresh allotments of land required for occupation being roughly demarcated on the authority of the Native Commissioner by native subordinates assisted by headmen. The decision to limit survey to the seven districts was due mainly to the cost to the native; but it cannot be said that the condition of the surveyed districts is so noticeably superior to that of other districts as to furnish a strong argument for an extension of the system. Restrictions regarding subdivisions were to some extent relaxed by Proclamation no. 300 of 1913 as regards the Transkei, and in the Ciskei by no. 66 of 1936.

The success of the Act as an experiment in individualization has been prejudiced by circumstances. Though undue subdivision is nominally prevented, the density of population is such as to deprive the regulation of most of its effect, since the landless members of the family continue to squat on the allotments; there were in the Glen Grey district, in 1929, 4,000 adults paying tax for whom allotments were not available; in the seven surveyed districts it was estimated that 11,000 married hut-owners had no arable plots. Further, it is doubtful whether with their present methods of cultivation the holders can support themselves on their allotments; the rural economy is largely dependent on the keeping of stock, and the numbers maintained are such that pasture is rapidly exhausted and soil in consequence eroded. It has not been possible for the allotment-holder to become in any real sense a farmer; the Native Economic Commission, indeed, recommended that the restriction on the size of holdings should be relaxed, the maximum suggested being 105 acres.¹ The conditions in the Transkei have not been such as to offer to the native any clear evidence that a more intensive cultivation would yield an enhanced return as compared with stock-raising, and the value of the right of transfer is reduced by the fact that the social organization allows other

¹ U.G. 22, 1932, *op. cit.*, paras. 140-52.

members of the community to secure the advantages of common grazing without acquiring an allotment. At all events, numerous allotments have been cancelled for failure of beneficial occupation.¹

The system of the unsurveyed districts, with its rough allotment by headmen of plots which carry only an occupancy right, has been held by many observers to have an elasticity which is on the whole better suited to the present conditions of the Transkei. It has, indeed, been suggested with some truth that the Glen Grey experiment missed out an essential stage in evolution to the individual title—namely, the allotment under appropriate conditions of plots large enough to accommodate extended family groups—and some have felt that even now it would be useful to allow kindred groups to amalgamate.² Elsewhere in the Union the grant to natives of a free right to dispose of holdings held by them in individual tenure has been attended with unfortunate results. The lands which the Griqua were permitted to retain under the old treaties were extensively alienated by them,³ and the small Moroka ward in the Free State has a somewhat similar record. The titles conferred by Moroka were confirmed when the Free State annexed his territory in 1884, but the holders were debarred from alienating except to relatives, a condition which was modified when the Moroka Ward Land Relief Act of 1924 allowed transfer to other members of the Barolong tribe with the sanction of the administration. But in the absence of regulations against mortgage many of the original ninety-five farms fell into the hands of Europeans, and most of the remainder are heavily burdened with bonds.⁴

The general position throughout the Union with regard to the purchase of land held by Europeans has already been explained.⁵ It was shown that native acquisition of title by purchase was allowed under various local conditions, except in the Free State, up to 1913; between that year and 1936 it was restricted except in the Cape Province. The Land Act of 1913 laid down that lands could not be acquired by natives outside native areas except with the Governor-General's approval. As this approval is in practice given only in exceptional circumstances, natives are virtually de-

¹ W. M. Macmillan, *op. cit.*, 1932, p. 189.

² S. H. Fazan, *op. cit.*, and *Memoranda*, Colonial 91, 1934, vol. i, p. 1090.

³ W. M. Macmillan, *op. cit.*, 1929, p. 221.

⁴ H. Rogers, *op. cit.*, pp. 146-7.

⁵ See above p. 721.

barred from acquiring lands except in the 'released' areas.¹ In 1935 it was estimated that natives held in individual title 1,393,428 acres in 'released' areas, and 645,432 acres in European areas; they were distributed between the provinces as follows: Cape, 124,873 acres in 'released' and 125,076 in European areas; Natal, 188,878 acres and 190,120 acres; Free State, 93,388 acres and 23,904 acres; Transvaal, 986,289 acres and 306,332 acres. As regards the Transvaal it may be noted that in 1905 the Transvaal Supreme Court ruled that natives could acquire land in individual title,² but the Land Act of 1913 has virtually restricted acquisition to the 'released' areas. Transfers of freehold title already held by natives outside scheduled and released areas are regulated by European law. The greater part of the land in the released areas will be held by the Native Land Trust for leasing or renting to natives who will hold it on their customary tenure; in exceptional cases natives will be allowed to purchase land in individual title from the Trust or from Europeans in these areas.

Southern Rhodesia. In Southern Rhodesia the custom in regard to native lands seems to have been little affected, but it is of some importance that the powers normally exercised by chiefs in the allocation of land are withdrawn in favour of the Native Commissioners.³ Considerable interest attaches to the introduction of new forms of tenure by administrative action. The 'Cape Clause' reproduced in the charter had given natives the right to acquire and hold land on the same terms as Europeans,⁴ and though the administration did not allow natives to make purchases from Crown lands, a certain area was acquired by them from Europeans, estimated in 1923 to be about 100,000 acres.⁵ The Land Apportionment Act of 1930 has now set aside an area of 7,464,600 acres in which purchases can be made through the Native Land Board; title will not be in fee simple, but held on conditions; thus it can be forfeited if land is not beneficially occupied; transfer and mortgage will be invalid without the board's consent, and in order to prevent undue subdivision, both testamentary and intestate succession have also been subjected to its control.⁶ By December

¹ See above, p. 722.

³ Native Affairs Act, 1927, sect. 42.

⁵ A. C. Jennings, *op. cit.*, p. 297.

² *Ex parte Tsewa*, [1905] T.S.C. 130.

⁴ See above, p. 735.

⁶ Native Wills Act, 1933, sect. 8.

1936 natives had taken up a total of 552 holdings, comprising an area of 188,182 acres, but part of this was acquired by groups; it is stated that natives have been prompt in payment of their instalments. Under the system introduced in 1932, land can be leased by natives at the ordinary rate of rent for Crown land, with an addition representing instalments of purchase. Southern Rhodesia has, therefore, made a substantial provision for the acquisition of individual title by natives who desire to live outside tribal conditions.

Northern Rhodesia. In Northern Rhodesia changes in native customary practice seem to be shown chiefly in the closer demarcation of family holdings in the more congested reserves and in the southern province, where intensive ploughing of corn lands is evolving a system of peasant farming. Action taken by the administration in the direction of granting individual title has so far been confined to the leasing of plots of about 5 to 10 acres in extent on Crown land in the vicinity of certain townships on the railway line and in the copperbelt. These were originally intended as residential plots, but are used as market gardens. The soil is rapidly being exhausted, and if the system is to be maintained or extended, adjustments will be necessary in rents, which are at present often out of proportion to the value of the holdings; and advice on working the land also appears to be required.¹ A few natives lease small farms in the southern province, parts of which they sub-let to other natives.

East Africa. In Nyasaland it is clear that economic conditions have begun to react on custom in the more congested areas; thus a practice of transfer was recorded as existing in 1920 in Marimba and West Nyasa districts.² In Tanganyika the results of population increase and the stabilization of cultivation have been seen in the more permanent demarcation of occupied lands in closely cultivated areas, such as Ukerewe Island and some regions on the shores of Lake Victoria, or in the enclosing of the vihamba of the Chaga on the volcanic lands on Kilimanjaro. It is stated that even grazing lands have at times been delimited, as in the case of the ngitili lands of the Sukuma. Occupied holdings are stated to be subjected to close subdivision near Mwanza. Transfer of the

¹ *Report*, op. cit., Colonial 145, 1938, p. 69.

² *Report*, op. cit., 1921, p. 5.

special form of nyarubanja title existing in Bukoba district, a survival of fiefs similar to those prevailing in Bunyoro in Uganda, is registered by the native authority, and among the Chaga a native authority regulation recognizes transfers of vihamba made with the authority of the chief. The conditions in the coastal area differ in a marked degree from those inland; it has been recognized in these districts that individual titles can be acquired by prescription, and tenure is regulated on a system adapted from the Moslem law. In the Lindi district, for example, increasing use is made of the courts to record land transactions; these for the most part concern land which has acquired a permanent value from the planting of coco-nut and fruit trees.

As regards the steps taken by the Tanganyika Government to deal with the question of land rights, it has been explained¹ that the land law makes the existence of a title dependent on grant or recognition by government, and that apart from the maintenance of freeholds derived from the German Government, title now takes the form of a right of occupancy granted by the Crown. This right, as has been shown, is held to include the title of a native or native community lawfully using or occupying land in accordance with native law and custom. While this provision gives ample security to natives in the occupation of their lands, an individual title can only be secured by the grant of a right of occupancy, and a wide concession of such titles over native lands, even if accepted as desirable in point of policy, could not be made effective without a land survey and the provision of machinery for registration. So far natives appear to have applied only for right of occupancy in small parcels of Crown land in the vicinity of townships, on which rent becomes payable. The tenure on peasant farms such as those at Kingolwira and Nyamahona, in which the administration is endeavouring to improve farming by the creation of 'peasant holdings',² does not seem to have received any formal legal definition.

In certain of the Kenya reserves the density of population, and the progress made in growing cash crops, has produced a marked effect on land custom. The Kikuyu, in particular, afford an interesting example of the modification of custom under new condi-

¹ See above, p. 764.

² See Chap. XIII, p. 969.

tions. The claim of the Kiambu Kikuyu that they had acquired a part of their area by purchase from the Dorobo is, perhaps, unique of its kind in East Africa. The true nature of the transaction is debatable; it is comprehensively described by the Land Commission of 1933¹ as a process partly of alliance and partnership, partly of adoption and absorption, partly of payment, and largely of force and chicanery; but for the present purpose its chief interest lies in the fact that in the Kiambu district the Kikuyu, on the strength of the tradition of acquisition from the Dorobo, now follow a recognized practice of selling holdings, and that a meeting of the combined Kikuyu native councils has laid down conditions regulating the recognition of sale. There is a certain tendency on the part of other sections to adopt the practice of the Kiambu district, though at present the general rule that pledges on land are redeemable is followed.

Kikuyu custom presents another interesting feature in the development of the githaka system.² It originated in the process by which families took possession of land in a country sharply divided by streams; on the lands on the ridges between the valleys, groups of families acquired rights over which control was not exercised by the clan authority. The usufruct of the land was divisible, subject to the supervision of the head of the group of families known as Muramati or warden. It would seem, however, that in some of the Kikuyu areas this control has, in modern conditions, become purely nominal, and rights have begun to vest in a single individual or sometimes in a man and his brothers rather than in the group occupying a ridge. The Kikuyu Land Tenure Committee of 1929³ stated with regard to the Kiambu district: 'If the present tendencies were to continue unchecked for another generation, it may be conjectured that in this area the Githaka would by that time have given place to the small holding as the unit of land tenure.' The introduction of the plough and the consequent increase of the area cultivable by the family unit is said to have led in the same tribe to the resumption of areas formerly pledged to outsiders.

The practice of sale appears to be gaining ground among some

¹ *Report*, op. cit., para. 285.

² *Report*, op. cit., 1929.

³ *Ibid.*, chap. i, para. 25.

of the other tribes in Kenya: it is said, for instance, to occur among the Teita. The permanent demarcation of family holdings is becoming common in the Kiambu district and there are cases where even grazing areas are roughly delimited, as in the kisesu system of Kamba. In the more congested areas an increasing number of holdings are subdivided; figures cannot easily be given, but an extreme instance is that at Maragoli in the Kvirondo reserve, where the average holding is now stated to be between half and a quarter of an acre. In the Machakos reserve there is the same tendency as in the Kiambu district to convert family into individual holdings; here progressive natives have built permanent houses and have used ploughs to cultivate comparatively large areas of land. The position in the coastal districts is exceptional, since here, as in the corresponding areas of Tanganyika, the customary law came under Arab influences, and individual rights were well recognized. But the titles to land are in a state of some confusion. In 1908 a Land Titles Ordinance was enacted, and from that date till 1922 inquiries into titles were carried out by a special Recorder; 21,700 claims were examined and 10,000 titles issued giving an indefeasible title subject to an appeal to the Supreme Court. Some 4,000 of these were never taken up, mainly because the cost would have been more than the claims were worth. The question has again formed the subject of a special inquiry, as suggested by the Land Commission of 1932; meanwhile, the matter has assumed a new importance in view of attempts made by companies to acquire mining concessions. So far as regards the effect of action taken by the state in introducing European forms of tenure, it may be noted that Kenya, apart from the recognition given to titles in the coastal lands, has as yet made no provision for the acquisition of proprietary title by natives, though some proposals on the subject were put forward in 1928. Reference has already been made¹ to the recommendation of the Land Commission of 1932 that 939 square miles be reserved for natives who find difficulty in settling in the reserves, such as returned labour tenants or natives removed from urban areas. The title would be leasehold, not freehold, and the leases would be either on individual or group tenure or given to corporate bodies; they

¹ See above, p. 750.

would be subject to the condition of indivisibility on succession; disposal or encumbrance would be invalid without the sanction of the administration. Legislation to give effect to these proposals has not yet been introduced.

In Uganda the most conspicuous developments have been seen in the results of the grant of the proprietary right in the Buganda Mailo lands, of which some account has already been given.¹ The Agreement of 1900 was a political measure, and, unlike the Glen Grey Act, was not a conscious experiment in the individualizing of tenures. It spoke of the lands of the Kabaka, and those to be allotted to the chiefs, as their 'private property' or 'estates', and this undoubtedly involved the recognition of some form of proprietary right, though this, as has been shown, was in itself alien to the system under which the chiefs had held their lands. The precise nature of the title to be conferred was determined on the recommendations of a commission appointed in 1906-7;² it was in most of its features that of freehold, regulated by a system of survey and registration, begun in 1904 and only lately completed. The grant of a title of this type was largely dictated by the desire to implement fully the terms of the Agreement, and there is no doubt that the administration was also influenced by the apprehensions of the Buganda chiefs lest their lands should be brought within the scope of the system of alienation of which Kenya was affording a conspicuous example. Had policy permitted it, some of the results which followed the grant of title might have been avoided if proprietorship had been qualified by limiting the power of transfer and prescribing the relations to be observed by the proprietor with the peasants occupying the land. Apart from the difficulties which arose in regard to the bataka lands, and the position of cultivators,³ the effect of the grant of estates to chiefs in proprietary right was to divorce landholding from the exercise of their political functions, upon which control over land had formerly depended. These functions now devolved on a new class of district chiefs, so that the possessors of Mailo lands acquired rights for which they rendered no service to the community, and as personal ties were broken with the passing of the first generation

¹ See above, pp. 760-3.

² Colonial, African 869, 1907, pp. 304-14.

³ See above, p. 762.

of landlords, and heirs succeeded who had no duties that brought them into close contact with their tenants, the relation of landlord and tenant began to be a purely commercial one.

The establishment of the Mailo system in Buganda was followed by requests for its extension to the Toro, Ankole, Bunyoro, and Busoga districts, but the government confined itself to the grant to the ruler and a few leading chiefs in Toro and Ankole of a limited area, to which they were entitled by agreements of 1900 and 1901 respectively, these grants being made as freeholds under the Crown Lands Ordinance of 1903. The question of the right to be granted to peasant cultivators in these four districts was investigated by a committee whose inquiries lasted from 1911 till 1920. The recommendations of this body tended towards the grant of the same type of proprietary rights as had been accorded to the Mailo owners of Buganda; but a realization of the difficulties caused by the grant of such a title in Buganda caused the administration to defer a decision. In his speech on the occasion of the completion of the Bunyoro Agreement of 1933, the Governor expressed a preference for securing the position of occupiers by legislation applicable to the whole country and not by individual agreements.

From 1923 to 1935 a series of draft ordinances have been prepared in an attempt to find a satisfactory form of legislation; the initial stages of discussion were still dominated by considerations based on the possible needs of alienation to Europeans for farms or plantations, and it was at one time proposed to delimit spheres for non-native and native occupation. As the demand for land by Europeans declined, attention was increasingly concentrated on the problem of finding a suitable type of tenure for native peasant occupiers; but no final decision has yet been taken. Meanwhile, there remains in force in certain districts the system, initiated as the result of the Toro Grievances Report of 1926, under which certificates of occupancy can be granted to cultivators, while reserving the property right to the Crown. These certificates give to the cultivator an undisturbed tenure so long as he occupies the land; further, he has the right of testamentary disposition and the right to dispose of trees, buildings, and crops when the occupancy is terminated. So far, little desire to obtain this certificate has been in evidence, partly because there has not been the pres-

sure from landlords which made tenants on the Buganda Mailo lands anxious to secure freehold. With the extension of commercial crops this demand may grow; it appears likely that the ultimate decision regarding the rights to be granted to cultivators may embrace a general provision of this nature.

Nigeria. In the British West African colonies modifications of native custom in regard to land are more clearly marked than in those of the East. In the northern provinces of Nigeria, as has already been observed,¹ conceptions based on Moslem law did not in practice lead to any considerable change in the original custom; the political authority of the emirs manifested itself chiefly in claiming an ultimate right of control over the land, and in the exercise of seignorial rights. The fiefs given out to Fulani leaders were administrative areas, and the right of the fief-holder to take a share of the taxation and the fact that estates were attached to certain offices, some of which are still held, were a means of rewarding political or military services; to this extent the system had many points of resemblance to that followed by the Mogul Emperors in India. The effect of economic developments is seen in the fact that family holdings are clearly delimited; the whole Hausa country is covered with small holdings, ranging from one to four acres. The tenure remains that of user only; but the transfer of this right, subject to the sanction of the emir, is now recognized by the native courts in Kano and Bornu. Such transactions are in addition subject to the law of the protectorate regulating transfers to 'alien' natives.² Kano presents an unusual feature in that the adoption of the principle of a tax based on the yield from land in six of its 'districts' has led to the survey and mapping of holdings by the native administration, the names of rightholders and transfers among them being regularly recorded.³ The land law now in force in Northern Nigeria, like that of Tanganyika, prescribes⁴ that an individual title can only be acquired in the form of a right of occupancy; few applications have, however, been made for such grants, and those mostly in regard to urban lands; nevertheless, it is clear that in the northern emirates an exclusive right of user, which has now lost most of the aspects of a communal

¹ See above, pp. 771 ff.

³ See Chap. X, p. 579.

² Ibid., pp. 773-4.

⁴ See above, pp. 772-4.

right, is being gradually built up, beneath the ultimate right of the Crown.

In the southern provinces of Nigeria, where the land has not been declared subject to government control as in the north, changes in customary tenures have reached a stage which merits treatment in some detail. In 1924 it was stated officially that transfers of town land were freely made among the Egba, and that in Abeokuta, in particular, many transactions concerning such lands bore all the features of private ownership. The answers given to an official inquiry in 1928 showed that sales were frequent in Ibadan, though in theory they came under the control of the native council. At Abeokuta the right to alienate had by this date become so generally recognized that sales of farm land were advertised, as many as a hundred auctions being held in the year, and sales were recognized even among the hill tribes of Mamfe in the British Cameroons. Ward Price's inquiry into land rights in the Yoruba Provinces¹ showed that transfers were there fully recognized, at all events so far as concerned land broken up by individuals. A general practice had grown up in the lower parts of the southern provinces by which sales were recorded in documents of legal form, which were frequently registered. In 1924 the Egba Native Council made a proposal that where it was proved to their satisfaction and that of the Resident that an Egba stood personally possessed of real property in the town of Abeokuta, he should be at liberty to sell or mortgage it; outside the town he should be able to mortgage his crops, but not the land itself. The proposal gained the support of the administration, which expressed the view that the existing lack of facilities for transfer was restricting the legitimate use of credit based on land, but the matter did not go farther, partly because the proposed scheme would have permitted of transfers to non-natives as well as to natives. Miss M. M. Green's study² of Ibo land-tenure showed that while temporary transfers of land amounting to short-term leases were common, the sale of land was forbidden by native law and custom.

In 1926 the question was revived on a broader issue. It was urged by the Agricultural Department that the lack of means for securing an individual title was prejudicing the prospect of im-

¹ *Report*, op. cit., 1933.

² *Op. cit.*

provement in agricultural methods. The Lands Office pointed out that the customary system of tenures was breaking down in some of the southern districts; large numbers of unregulated transactions were taking place among natives, and everything pointed to the need of some provision for recognizing and recording titles. It emphasized the fact that the administration had so far touched only one aspect of the problem of transfer; the Native Lands Acquisition Ordinance had provided that no alien could occupy or hold land without the approval of government, and native authorities had been encouraged to make rules under the Native Courts Ordinance to prevent 'stranger' natives from occupying land without a certificate from the native authorities; but nothing had been done to legalize the growing practice of transferring lands among natives of Nigeria.

In the Residents' conference which discussed this question in 1929 and 1930 there was diversity of opinion: it was held by some that sale and mortgage were so alien to native law and custom that they should not be recognized; others objected that the extension of proprietary rights would prejudice the system of native authority administration; and others again, while admitting that custom was becoming modified and that transfers were taking place, held it to be inadvisable at that stage to do anything which would stabilize native rights in terms of the European law of property. There was a feeling that for the present it would be sufficient to give to native authorities the power to regulate sales and record rights, a process which would not only have the value of elasticity, but would recognize the position which certain of these authorities now occupied in legal control of transactions regarding lands. The government inclined to the latter view, but legal difficulties were found to stand in the way of framing rules under the Native Authority Ordinance, and a Bill which was drafted in 1933 to give the necessary powers to native authorities in the Yoruba Provinces also had to be dropped. The subsequent Registration of Titles Ordinance of 1935 provides for the issue of titles on application, and gives a title in terms of freehold and leasehold, but it will be confined in the first instance to Lagos Township, where these forms of tenure are well recognized and documents of transfer have been regularly registered. Lagos has the further advantage of a

complete survey. The extension of this measure to other areas will depend on the experience gained of registration of title in Lagos, and on observations made of the manner in which property rights shape themselves elsewhere.

In the Cameroons under British Mandate there are considerable sales of land to stranger natives in the south; in two divisions, Victoria and Kumba, strangers now outnumber the original inhabitants. Sales are now regulated by rules made under the ordinance regulating the disposal of land to strangers.¹

Gold Coast. In the Northern Territories of the Gold Coast there seems to be little evidence of mortgage or transfer, though in the more congested areas of Zuarungu or Navrongo the limits of family occupation are regularly demarcated. Here, as in the northern provinces of Nigeria, title is only granted in the form of a right of occupancy from the Crown. In the southern areas of the Gold Coast the movement towards the commercial use of land has reached a stage even more clearly marked than in the southern provinces of Nigeria. The wide use by the chiefs of their powers over 'stool' lands for the grant of concessions,² the growth of land values owing to the expansion in the export of cocoa, added to the spread of the practice of using English documentary forms of transfer, have created conditions in some of the colony districts which have been described as amounting to a virtual breaking up of the older usages in regard to land.³ To these influences must be added that of a judicial system which has brought large numbers of land cases on appeal up to the Supreme Court;⁴ the latter, though maintaining the customary rights of the family in succession to land, has tended to deal with transfers in terms of English law.

The result was on one occasion officially described as 'an exasperating uncertainty' in respect of titles to land,⁵ a description which no doubt referred mainly to the difficulties which government and mining interests had to face in ascertaining the title in lands acquired for public works or commercial purposes; but there is also evidence of a sense of insecurity among natives in

¹ *Laws of Nigeria*, cap. 85 (s. 24).

² See above, p. 776.

³ A. W. Cardinall, *op. cit.*, 1931, p. 68.

⁴ See above, pp. 775-7, also Chap. VII, p. 288, Chap. IX, pp. 465 ff.

⁵ *Address by the Governor to the Legislative Council*, 1929, p. 97.

regard to the conditions under which they occupy their lands, arising partly from the extent of the alienation of 'stool' lands by chiefs, partly from the difficulty in obtaining a legal title to lands transferred by one native to another. Litigation regarding land rights was said in 1926 to have become a curse of the country.¹ This aspect of the land problem has been considered by government at different times from 1922 onwards. The proposal first put forward for introducing a system of general registration of native titles was clearly premature; registration presupposes the existence of a law of property or at all events of sufficiently defined titles, and this condition did not exist. It was proposed to meet some part of the difficulty by the establishment of administrative land courts which should deal with land questions coming up from the native courts before they went on to the regular judicial tribunals,² but the proposal was not followed up.

It was believed at a subsequent stage that a basis for title could be found by giving legal recognition to prescription as applied to the occupation of native lands. The courts had accepted as a general principle that African custom did not recognize the acquisition of adverse title by long occupation; but there were, on the other hand, cases on record in which they had held that long occupation and the development of the land under economic crops could confer a valid title, and acting on this decision had allowed execution in cases where persons holding and developing 'stool' land for considerable periods had subsequently mortgaged it.³ An ordinance drafted in 1927⁴ to give legal recognition to prescription was opposed by the Gold Coast Provincial Councils and abandoned. More recently it has been contended, on the basis of a further ruling of the Supreme Court in much the same sense,⁵ that these decisions had the same effect in practice as a Statute of Limitations. Even, however, if these rulings could be admitted as adequate, there would still be no means of securing recognition of title other than by reference of each case separately to the courts. The time may not be ripe for attempting a general registration of titles; but there would appear to be an adequate basis

¹ *Report*, op. cit., Cmd. 2744, 1926, p. 147.

² Cmd. 2744, op. cit., pp. 148-9.

³ *Lokko v. Konklofi* [1907], *Renner's Gold Coast Reports*, 1915, vol. 1, part 2, p. 450.

⁴ Limitation of Civil Proceedings Ordinance, 1927.

⁵ *Aduah Aduwah v. K. Minson*, *Gold Coast Law Reports*, 1926-9, p. 465.

for an experiment in registration in such areas as Accra, Takoradi, or the Crown lands of Kumasi, or in areas where title has been validated under the Concessions Ordinance. Outside these areas it will not be possible to make further progress until the limits of 'stool' jurisdictions have been decided (preferably by administrative decision having legal validity), the powers of chiefs in disposal of 'stool' lands legally defined, and the nature of the right which can be acquired by virtue of the occupation of land has been defined by statute.

In Togoland under British Mandate considerable land sales are made by chiefs to strangers, who generally have some tribal relationship with the local people, and as much as £20 is frequently paid by them for a village plot on which to build a house.

The French Colonies. In the French territories changes in customary law seem to have been less extensive than in the British West African colonies.¹ There are, however, recognizable instances of developments in the direction of individual ownership. Thus in Senegal there is an established system of rental, which appears to be based on an original recognition of seignior, the payment being on a scale fixed by custom similar to that of the *zakkat* or Islamic tithe; this has a parallel in the similar rentals taken by Arab holders of land in Dikwa, British Cameroons. In the well-populated lands of Dschang in the French Cameroons, holdings are marked off with permanent boundaries,² and on the lower Sanaga river there have occurred cases where men of tribes living in the delta islands have purchased lands on the mainland, which they now claim to hold in individual right.³ The court at Yaounde in the Cameroons by a decision of 1935 practically accepted the principle of prescription by ruling that individual property could be recognized in land on which a house had been built or valuable trees planted. In French Togoland the leasing of land is a well-established practice, and it would seem that this is also the case in Dahomey and the Ivory Coast.

In their land system the French recognize two classes of rights—namely, the full title of proprietorship, and the customary rights existing under native law. The full title is obtained by the *im-*

¹ See L. Geismar, *op. cit.*

² *Rapport annuel au Conseil de la Société des Nations sur l'administration du Cameroun*, 1922, p. 46.

³ *Ibid.*, 1923, p. 50.

matriculation of lands acquired by the process of grant, concession, or purchase from the state, or by purchase from natives; the system, which applies to the French colonies but does not exist in the same form in France itself, was inspired by that first associated with the name of Sir Robert Torrens.¹ As the title when registered is indefeasible, in the sense that it is certified by the state against all third-party claims, it is granted only after full notice to other claimants and the examination of their claims by the Conservator of Property, contested cases being referred to the courts; the holder has then full rights of disposal in transactions of all kinds. In French West Africa the system was introduced by a Decree of July 24, 1906; registration was made compulsory in cases of alienation by the state or purchase of rights from natives by Europeans or *assimilés*; it was open to natives to seek *immatriculation* for property held or acquired by them. In Equatorial Africa the privilege of *immatriculation* of land was at first confined to Europeans and *assimilés*, but was extended to natives, with some limitations, by a Decree of December 12, 1920. It was introduced in French Togoland by a Decree of December 23, 1922, and in the French Cameroons by a Decree of July 22, 1932.² It is an important fact that the *immatriculation* of land renders it subject to the French civil code, as modified for use in the colony, in so far as concerns transfer, mortgage, or encumbrance, though it is still subject to native law in regard to succession.

The provision for the *immatriculation* of native property is part of a general policy which attaches great importance to processes tending to encourage the recognition of individual title in native land. Some reference has already been made to the influence of the judicial conception of property as an individual right, but individualization has been advocated equally on economic grounds. Not only have writers such as M. Leroy-Beaulieu³ emphasized this policy, but official reports have consistently put it forward as the objective of government. As the report on the colonial budget of 1910 put it, 'the system of individual ownership is incontestably

¹ See below, p. 876.

² A. Girault, *Principes de colonisation et de législation coloniale*, 1930, vol. iii, chap. xvi; P. Daresté, *Traité de droit colonial*, 1931, vol. ii, pp. 216-17; *Rapport annuel au Conseil de la Société des Nations sur l'administration du Cameroun*, 1934, pp. 91, 187.

³ *De la colonisation chez les peuples modernes*, 1908.

the one which is most favourable to production'.¹ Its advantages as affording a basis of credit have been freely pointed out to native leaders; thus the Governor of Togoland, speaking to the Lome Council of Notables in 1924, stated: 'Si vous désirez avoir de l'argent, il faut immatriculer vos terrains; vous pourrez ainsi obtenir des avances de la Banque.'² The opening to natives of the right of registering their lands by *immatriculation* was regarded as a step to 'voluntary individualization'. The progress made under the procedure of the 1906 decree was, however, disappointing; a commission appointed to investigate the matter in 1915 found that the total number of titles issued was 1,267, the majority being for urban property.

As a result of their recommendations a simpler process, that of the *constatation des droits fonciers des indigènes*, was introduced in French West Africa in a Decree of October 8, 1925, in French Togoland by that of August 24, 1926, and in the Cameroons by that of July 21, 1932; this last Decree supplemented in turn an earlier Decree of August 20, 1927, providing for the issue by district officers of *actes de notoriété*. Persons who seek a record of *constatation* approach the *Chef de Circonscription*, who, after publishing the demand locally, makes an inquiry from chiefs and notables, referring contested cases to the native tribunal, and finally delivers to the claimants a *livret foncier* describing the nature of their rights. This can be applied to family and collective as well as to individual rights; unlike *immatriculation* it does not create an indefeasible proprietary title, but is intended to secure the holder from dispossession by anything but judicial process, and has the advantage of leaving the land subject to native law. In the mandated territories, the production of this document is required before the alienation to a non-native of land registered under this procedure can receive administrative sanction. Applications for *constatation* have so far been confined mainly to areas such as the cocoa lands of the Ivory Coast and to urban properties; elsewhere it has not yet become widely popular among natives. In Togoland natives desiring title appear to belong mainly to the urban class, and prefer the full *immatriculation*, and applications under the simplified procedure are so rare that the administration has ceased to publish figures. In

¹ Quoted in Sir F. D. Lugard, *Dual Mandate*, 1929.

² *Minutes of Session*, 1924.

the Cameroons, where the procedure under the Decree of 1932 only came into force in 1934, it had been applied by the end of 1935 in 67 cases, covering a total area of 1,067 hectares. In the whole of West Africa by 1934 it had been applied in 184 cases, covering 22,169 hectares. Under the *immatriculation* procedure the number of titles registered in French West Africa up to 1934 was 16,580, in the Cameroons 81, in Togoland 1,167.

The process of *immatriculation* is devised for the recognition of a system of proprietorship rather than one of usufruct; it is not adapted to the record of family or collective rights; the procedure is expensive, and from the native standpoint it has the defect that the prescribed method of publication in the *Journal Officiel* does not give adequate notice to other possible claimants. The latter fact furnished the grounds for the protests which were from time to time put forward against the system by the *Conseil Général* in Senegal. In the view of some classes of natives it has the further disadvantage that it subjects property rights to French law, and takes them out of the cognizance of the native courts. At one time its general application was opposed in some colonies by the authorities themselves, who hesitated to encourage the acquisition of clear title by natives in areas where the state itself might be likely to require land for public purposes or for alienation to Europeans; in that case property might have to be purchased which could otherwise have simply been regarded as *terre vacante*.¹ It is, however, correct to say that importance no longer seems to be attached to this consideration. Local policy now appears to recognize that resort to *immatriculation* on any considerable scale must await an expansion in the use of the powers of *constatation* as a method of establishing individual rights in holdings. The movement towards individualization has been to some extent assisted by another process—namely, the grant of concessions to natives from state lands; in urban areas in Senegal, Sudan, and the Upper Volta, where locations have specially been reserved for their occupation, the title granted is subject to the condition that there is no right of disposal to non-natives. In most cases the grant depends on the completion of development conditions.² Again, in the Sotuba canal

¹ *Journal Officiel*, 1922, p. 102.

² *Arrêts*, Oct. 8, 1924, Senegal; Apr. 24, 1920, Sudan; Dec. 22, 1928, Haute Volta.

colony about 5,000 persons have been given allotments in which they will acquire full rights at the end of a probation period of ten to fifteen years, and there will be a large development of this system when the major Niger Canal project comes into full operation.¹

The Belgian Congo. In the Belgian Congo it would seem that native land custom has so far been little subject to modification; for the most part there is little pressure of population, and the peasant cultivation of commercial crops is in an early stage of development. There is, however, in Belgium a school of thought which holds that economic advancement would best be secured by a system of peasant proprietorship; 'l'établissement du paysannat sous la forme la plus intégrale' was one of the policies recommended by King Leopold III in addressing the Senate in 1933, after his visit to the Congo. The practical implications of this proposal have been discussed by the Director of Agriculture in an article published in 1934.² A draft decree has been submitted by the Governor-General which would allow for native private ownership and the legal constitution of communal lands, but no more definite steps have yet been taken in this direction, and there is evidence that the administration is conscious of the effect which undue pressure might have in disintegrating native society. The Congo law attaches legal validity only to titles which have been secured by *enregistrement*; native land rights, not so secured, remain subject to native law and custom.³ Registration is effected by the *Conservateur des Titres Fonciers*, and is compulsory for all lands alienated by the state, or acquired by non-natives from natives; in the latter case the grant of title has to be approved by the administration. *Enregistrement*, though not carrying on its face the same guarantee as the French *immatriculation*, has much the same effect; in certain circumstances the state would appear to become responsible for a defect in the registration of encumbrances.⁴ It will be seen that the procedure applies only to proprietary titles acquired by non-natives; there appears to be no provision, such

¹ See Chap. XV, p. 1050.

² M. Leplac, 'Les avantages et les modalités d'introduction du paysannat intégral', *Congo*, Apr. 1934; and M. le Comte de Briey, 'La propriété foncière indigène', *Congo*, Apr. 1933.

³ Decree of Sept. 14, 1886; *arrêté*, Nov. 8, 1886.

⁴ Decree of Jan. 5, 1923.

as that existing in the French colonies, for enabling land in native occupation to be registered in proprietary title.

In Portuguese territory provision exists for granting title to natives on any land which they may have occupied outside the reserves, but the number of titles given is small. The Moçambique Company in 1932 introduced a system whereby holdings are offered to natives desirous of growing export crops; they are entitled to proprietorship after twenty years' occupation.

(d) A Review of Present Policies

From the foregoing account it will be clear that the problems connected with private rights in land fall into two categories. The first comprises those lands, relatively small in area, over which state action has given a title in European form and which, therefore, come under a law of property based on European law; the second comprises the great bulk of native lands, in which rights are still regulated by native custom. The former class has its own problems, to some of which reference has been made, as, for instance, whether the state shall recognize a freehold or a leasehold title in respect of lands which it alienates, or whether it shall insist on development conditions, or introduce terms which will secure it a share in the incremental value due to the general advance of the territory.¹ For the solution of problems of this nature ample precedents exist elsewhere. There is, on the other hand, little experience to guide those who have to deal with problems arising from the character of African land custom. In the description of the customary systems of land tenure prevailing in Africa it was suggested that they were typical of a stage of civilization at which there was little pressure of population on the land, and native life was organized mainly to satisfy subsistence needs. The question, however, arises whether, even where such conditions still prevail, the African system is calculated to give that amount of security and that measure of incentive to individual effort which is necessary if the best use is to be made of the land. It is obvious, again, that elsewhere large areas are being brought under new economic conditions, and that native land custom is already adjusting itself to the needs which they are creating. What steps have adminis-

¹ See above, p. 772.

trations taken to guide this process of adjustment? What system of rights in holding land do they themselves envisage as most suitable to native African conditions? In seeking an answer to these questions it is, perhaps, unnecessary to emphasize the consideration that the evolution of the most suitable form of land tenure is not merely an economic or a legal problem; among peoples whose circumstances do not provide any alternative means of livelihood, their relation to the land is not only the economic fact of most importance in their lives, but is closely integrated with all their social custom. It is this consideration that gives peculiar significance to the action taken by African administrations, either in guiding the natural process whereby land custom is adapting itself to new conditions, or in taking measures to substitute for it a new system of land rights.

It may, in the first place, be of advantage to analyse the tendency of the changes to which African land customs are now being subjected. If it has not been possible to describe them in full detail, the general picture is clear. There remain large areas in which traditional practice has been little affected; but even in some of these areas the rights of user are becoming more exclusive, in the sense that the clan at large is ceasing to have an interest in such lands, and the group or family occupying them have no interest in other clan lands. Other, but much smaller areas, mark a further stage when, owing to pressure of population and the growth of market crops, land begins to be given over to others for occupation; but leases are still often given in return for a gift or service of the traditional type, and the transaction is still dominated by the conception that land can only be pledged, and that a pledge is always redeemable. Finally, there are a few areas in which land values have now become so far commercialized that leases and sales on a cash basis are explicitly recognized; even here, however, rights are as a rule still viewed as vested in the family rather than the individual. It would, therefore, be correct to say that usufruct still remains the prevailing conception for the greater part of Africa; if usufruct has, in many cases, approached very closely to ownership, the latter only becomes patent when holders begin to exercise the right of transfer.

It is mainly when land has acquired an exchange value that

the authority exercised over it by chiefs acquires special significance. In some areas the traditional authority of chiefs over the distribution of tribal lands has developed into the exercise of a right of disposal to strangers, or a seigniorial right to take dues amounting to rentals. In certain British areas, the power of control over the taking of rent from stranger natives has been vested in the native authorities constituted as part of the machinery of indirect rule, and has therefore been brought within the field of statutory regulation; but elsewhere, as for instance in the Gold Coast, no such system has been applied, and the question of the disposal of rights in the communal lands is complicated by the fact that the actual seat of authority is sometimes obscure, and the extent to which the exercise of the right depends on the consent of elders or the like is undetermined. The disposal of lands to outsiders, even if it does not mean the dispossession of existing occupants, always involves the reduction of the margin of land available for distribution among members of the clan or tribe when the population increases, or lands under cultivation become exhausted. There is, in consequence, danger of a conflict between the rights of communal right-holders and those of chiefs exercising their political authority, and an increasing likelihood that the latter may, with the growth of commercialized conditions, assume the position of landlords. There are definite indications of this tendency in some of the French territories, and in the coastal areas of British West Africa.

There is nothing peculiar to Africa in the general direction which the evolution of land custom is taking; its adjustment in response to economic changes is a natural process which would occur independently of any action taken by the administration. It would, at first sight, appear that the state has two courses open to it: it may decide to allow the adjustment to take its natural course, or it may determine the course of development by regulations designed to produce that system of tenures which it considers most suitable to native landholding. But in practice, even where a government refrains from intervention in the process by so decisive a method as the introduction of legislation, the action of its administrative officers in reviewing the decisions of native courts, or in advising native administrations where they have been

given powers to regulate land tenure, must have an important influence upon the modification of custom; and where the judicial system provides that land cases shall come up on appeal from native courts to its statutory courts,¹ it is exercising a similar influence. In either case, therefore, great significance attaches to its conception of the form which native land tenures should ultimately take.

It will have been seen that, at the outset, the attention of governments in Africa tended to centre on questions connected with the acquisition of native lands by the state, or the regulation of alienation by natives to non-natives. In this respect, policy has now been sufficiently defined, even though it may not have been fully worked out in detail. There is less evidence of a considered approach to the question of the form which native rights in land should ultimately take. The French appear to have come nearest to a definite policy in so far as they look forward to the general expansion of a system of proprietary rights through the medium of *immatriculation*; the procedure of *constatation des droits fonciers indigènes* appears to be designed as a convenient preliminary to the more complete process. If so, then the influence of the *tribunaux indigènes*² will doubtless tend to mould native custom to the same end. The proprietary right thus established would be subject to the usages of European law, save in regard to succession, where it would follow native custom; and, though it is not possible to anticipate further policy in this respect, it is likely that the title will tend ultimately to be vested in the individual rather than the family. There is, at present, no indication that French policy will recognize the necessity for placing restrictions on the leasing of land held in full title, or on its use as security for credit. The state will doubtless continue to exercise the power to control alienation of native land to non-natives; but this would not modify the character of the title under which lands are held, nor the effect which its general use would have on tribal organization, or on native social life. Belgian policy is less clearly marked, and it is still doubtful if the individualization of property will be adopted as the policy of the government.

As regards the British territories, the Cape province has given

¹ See Chap. VII, p. 287, and Chap. XI, p. 431.

² See Chap. VII, p. 276.

the clearest indication of a desire to make a radical change in the direction of individualization. When the Cape Government introduced the Glen Grey system, it clearly contemplated a general system of individual holdings, which would not be held in full proprietary right, but would be heritable, and subject to state control of transfers. The system has not, however, been extended beyond areas in the Ciskei and Transkei.¹ It is unlikely that the passing of the 1936 Land Act will result in the purchase by natives of freehold land on any considerable scale in the 'released' areas; in the Union reserves, the tendency will be to exercise supervision over the occupation of land by natives to ensure that they make the best use of it, and native land custom will only be allowed to develop its own forms of tenure subject to these conditions. Sir Alan Pim, in discussing the benefits or otherwise of individualization of land tenure in Basutoland, considers that the safest line of advance would be to build on existing custom, to induce chiefs to promise protection to those who improve methods, and to aim ultimately at a system of registration of lands through chiefs.²

There is lacking any general statement of policy by the British Government in regard to the treatment of land tenures in their colonies and mandated areas. The Commission on Closer Union in East Africa³ confined itself to suggesting that existing systems of communal or clan cultivating rights could not be permanent, and that economic conditions would create a demand for some secure form of individual tenure. The Southern Rhodesia Commission of 1925,⁴ while of opinion that land tenure in the reserves must be regulated by native custom, would not perpetuate in the native purchase areas a system which they held to involve an uneconomic use of land. Native witnesses preferred freehold to leasehold, and the Commission recommended the introduction of individual tenure in the purchase areas, but thought that title should not be conferred till proof had been given of beneficial occupation; it should then be qualified by the condition that transfer should require sanction, and mortgage be allowed only

¹ See above, p. 844.

² *Report on the Financial and Economic Position of Basutoland*, Cmd. 4907, 1935, pp. 177-80.

³ *Report*, Cmd. 3234, 1929, p. 52.

⁴ *Report*, paras. 67, 134, 253.

under stringent safeguards. The Kenya Land Commission¹ considered that native custom in the reserves should be guided in the direction of private tenure, proceeding through the group and family towards the individual holding.² The Committee on Kikuyu Land Tenure,³ in discussing the development of the githaka system, regarded the ultimate individualization of the rights as inevitable; they held, however, that the transition should be effected not only by regulation, but also by the action of the native authorities, under the guidance of their administrative officers. The report of the Committee throws an interesting light on the extent to which native land custom can be modified in Kenya by officers presiding over District Councils. In areas coming under indirect rule, influence would take the form of advice to native administrations. Reference has already been made to the course taken by the administrations of Uganda,⁴ Tanganyika,⁵ the Northern Provinces of Nigeria,⁶ and the Northern Territories of the Gold Coast.⁷ In the last three the policy adopted has been to allow native tenure to evolve without interference, subject to the radical right of the Crown; under their law, individual title can be obtained by application to the state, but it will take the form only of a right of occupancy, not of freehold. In the Southern Provinces of Nigeria⁸ and the Gold Coast⁹ there has been no formal decision as to the form which title in native lands should take; in the areas where commercial production is highly developed, economic conditions and judicial decisions have combined to create a form of proprietary right, but the administrations have shown some natural hesitation in accelerating this process by making any legal enactment which would amount to creating a proprietary title.

(e) *The Future Form of Title in Land*

All discussions on the subject agree as to the value of giving security to the occupier of land, and the further advantage of what is generally termed the individualization of tenures. It has been urged on different occasions that the extended system of rights,

¹ *Report*, op. cit., para. 650.

³ *Report*, 1929, pp. 35, 47 ff.

⁶ *Ibid.*, pp. 771 ff.

⁹ *Ibid.*, pp. 775 ff.

² See above, pp. 749 ff.

⁵ *Ibid.*, pp. 763 ff.

⁴ See above, pp. 759 ff.

⁷ *Ibid.*, pp. 779 ff.

⁸ *Ibid.*, pp. 769 ff.

vested in the family or group, has proved in Africa to be an obstacle to improved agriculture; this applies not only to long-term improvements such as drainage, terracing of hill-sides, or planting of permanent crops such as cocoa and coffee, but also to cultivation designed to increase the output of subsistence crops. A Bechuanaland chief has been quoted as saying that 'in the communal system nobody who is willing to progress can have freedom to use his progressive ideas',¹ and in Basutoland chiefs are said to discourage measures which are essential for the preservation of land, such as the planting of trees or fencing of pasture lands, as implying a claim by the individual to rights over communal land.² Those who have had to deal with East African conditions have added the further argument that there is little incentive to natives to reduce their live-stock in order to prevent the wastage of pasture and consequent erosion, since nothing done by the individual will avail unless his neighbours take corresponding action; it is said again that the control of animal disease becomes additionally difficult under a system of communal grazing. It has finally been urged that, in some areas, the need has already begun to be felt for credit to finance the improvement of systems of cultivation, as well as for trading and minor industries, and that land, which is usually the sole security on which it can be raised, is not available for the purpose where a communal system of holding prevails. Each of these arguments is relevant in its own context; but it is necessary to analyse some of the general implications which, taken together, they would seem to suggest.

'Communal' or 'collective' tenures do not necessarily involve insecurity for the cultivator: in parts of Africa where cultivation is well established there is, in practice, little disturbance of occupation; insecurity on the part of the cultivating occupier is, indeed, an incident much more common to the relations of landlord and tenant than to the 'collective' system prevailing in Africa. The practice of shifting cultivation does not involve insecurity of tenure; and it would be premature to tie down cultivators to fixed areas until we can indicate to them with confidence agricultural methods which are likely to yield better returns.³ Again, the advantages

¹ M. L. Hodgson and W. G. Ballinger, *Bechuanaland Protectorate*, p. 54.

² L. Barnes, *The New Boer War*, 1932, p. 64.

³ See Chap. XIII, pp. 879 ff.

held to be inherent in 'individualization' are not necessarily to be secured only by attaching rights to the individual; there are some types of cultivation, such, for instance, as those which require frequent clearance of forest growth, which make the family or extended family the most suitable economic unit in cultivation. The question of rights over grazing commonages presents its own difficulties; the partition of grazing grounds into small units would be a bar to the adoption of that rotational use of pasture which many hold to be the best preventive of erosion in East African conditions.¹ It is clear, therefore, that there are many areas in which, at this stage, a policy of unqualified 'individualization' would involve economic disadvantages; and it is unnecessary to enlarge on the prejudice to the existing social structure of Africa which might result from the premature adoption of any policy extending exclusive rights in land.²

There are, on the other hand, certain areas in which a more definite advance in the direction of individualization is now justified both by economic and social conditions, and it becomes of importance to consider what form the process may most suitably take in such circumstances. Experience elsewhere abounds with illustrations of the far-reaching effects, often unforeseen by their authors, which have followed from the form taken by legislation defining the title to land. Thus, it was the form adopted in creating title which gave to Bengal, on the one hand, a rural economy of large landlords and a servient tenantry, and to parts of Northern India, on the other hand, a system of strong peasant proprietors. Any action taken in this matter becomes difficult of subsequent recall, because valuable interests settle round the form of title adopted. From what has been said in previous paragraphs, it will be realized that the power of regulating forms of title arises in three fields. The first comprises those areas in which the state has retained ultimate ownership in its own hands, such as the reserves in South and East Africa, or the areas in which it has asserted a full power of control over all lands over which it has not already given a definite title, as in Tanganyika, the Northern

¹ See Chap. XIII, p. 971, and Chap. XVI, p. 1067.

² See M. Hunter, 'The Effects of Contact with Europeans on the Status of Pondo Women', *Africa*, vol. vi, 1933, pp. 270, 271.

Provinces of Nigeria, or the Northern Territories of the Gold Coast. In such cases the state recognizes, defines, or creates subordinate rights by virtue of its own position as ultimate proprietor. Secondly, there is the field in which the state has asserted right of ownership only in vacant or unoccupied lands, as in the French or Belgian territories: in such areas, the process hitherto adopted for the grant of title has been to declare a particular unit of land to be vacant or 'unoccupied', and to confer a title from the state over what has thus become its own property. Thirdly, there is the field in which the state has claimed no rights over land, save those acquired by it through purchase or escheat, as in certain British west-coastal areas. Here the method followed will be the legal recognition of some form of title found to exist in practice, possibly modified in the process of definition.

The strong preference which was, at one time at all events, expressed in Europe for the proprietary title, was not based on any comparison between 'collective' or 'individualistic' systems. The belief in the 'magic of property' which, in Arthur Young's phrase, turned sand into gold, was based on a conviction of the superiority of the status of cultivator-owner over that of cultivator-tenant. If, in later years, the proprietary status generally has come under attack, it is not because it is no longer held to possess the virtue then believed to be inherent in it, but because proprietorship, in some circumstances, can give the holder a larger share of the incremental value acquired by his property than his contribution of capital or other effort justifies. In the present conditions of Africa, however, the problem of securing for the state a share in the incremental values of land, though not unimportant, is not one of the more pressing considerations which must determine the decision regarding the type of title to be recognized in native lands.¹ Other consequences of the creation of the proprietary title have greater significance at the present stage of economic development in native Africa. Those who regard its extension as unsuitable to native African conditions have urged that it has been found elsewhere to lead to the over-capitalization of land values, the misuse of the power of raising credit on land, the economic mischief of subdivision and fragmentation, and

¹ See above, p. 772.

the creation of a landlord régime. It is not suggested, even by those who most strongly oppose the creation of proprietary rights, that these results necessarily flow from the nature of the title itself; it is, however, felt that, given certain other conditions, the holding of land in proprietorship is favourable to their development.

It is necessary to examine in some detail the manner in which developments of this nature may be expected to occur in African conditions. There have certainly been instances in Africa in which the advantage taken of the negotiable value acquired by land in commercialized conditions has led to speculation and the over-capitalization of its value, with the double effect of accumulating land in the hands of those who do not themselves develop it, and of penalizing new-comers by forcing on them an undue burden of overhead charges. The European areas in the Union of South Africa afford many illustrations of this process; it would, however, be premature to suggest that, in the near future, conditions are likely to exist among Africans which may lead to speculation in native lands. The possible misuse of credit based on land is a matter of more immediate concern. The Native Economic Commission of 1930-2¹ remarked on the liability of the natives in the Union to misuse the power of borrowing on such lands as they have been allowed to hold in proprietary right, and a similar tendency has already been noted in certain parts of the Gold Coast and French West Africa. But, so far, conditions have not favoured the growth of money-lending; the general restrictions imposed on the sale of native land to non-natives, as well as the limitations which some territories have placed on the giving of credit to natives by non-natives, have militated against it.

Agricultural indebtedness has produced serious economic and social mischief in Egypt, and, as the report of the Indian Agricultural Commission² has shown, it has reached almost incredible proportions in some parts of India. It has been one of the less creditable features of British rule there that it failed to realize at an earlier stage the normal result of allowing the unrestricted use of the credit facilities which came into existence with the general

¹ *Report*, op. cit., paras. 166, 167.

² *Report of the Royal Commission on Agriculture in India*, Cmd. 3132, 1928, chap. xii.

registration of the proprietary title in land and the improvement in economic conditions. The credit available to the landowner has been used, in addition to its legitimate function of providing finance for farming purposes, for a great variety of other expenditure; and the heavy burden of mortgage-interest is not merely a bar to the improvement of agriculture, but has reduced large numbers of landholders to a state of economic serfdom which has, in turn, involved unfortunate social reactions.¹ The recent depression period called attention to the peculiar feature of agricultural debt, in that at periods when prices are suddenly depressed a debt-charge tends to trench on the margin of subsistence; it can then only be adjusted by special legislation, which is of a far more difficult character than that required for the adjustment of commercial debt. Some of the provincial governments in India have attempted to prevent the accumulation of agricultural debt by legislation limiting the period for which land can be mortgaged, or restricting the class of persons to whom it can be transferred, but these measures are easy neither to frame nor to execute; and whatever success they may attain, they will still leave a great burden of previous debt on the land. It stands to the credit of the land system of the Dutch East Indies, where titles are not transferable, that there is little agricultural indebtedness; the need for short-term loans for agricultural purposes seems to be adequately met by the State Credit Banks.

Another type of problem is created by the subdivision of holdings, and 'fragmentation', that is to say, the creation of holdings consisting of scattered units which results from the complex systems of inheritance recognized by Moslem and by some native law. A refusal to give legal recognition to the partition of holdings does not, as the experience of the Transkei has shown,² necessarily prevent the occupation of the holding by more persons than it can economically carry; until social conditions arise which enable the registered holder to remove other members of the family from the holding, they will continue to share it. Finally, the development of a system of landlord and tenant does not depend entirely on the recognition of the proprietary title: it can arise even where

¹ *The Central Banking Enquiry* (1930) put rural debt at £675,000,000.

² See above, p. 844.

the title is only one of occupancy, if the right-holder has at his command land surplus to his immediate requirements, or which it is more profitable to cultivate through others. As has been shown, in some areas the letting of land is already an established practice under native custom. But the existence of a proprietary title which is readily transferable undoubtedly tends to introduce new and less desirable relations between owner and tenant, and therefore tends to accelerate conditions under which these relations have to be regulated by legislation.

While considerations such as those referred to must always come into account, the decision as to the form which land titles should take must depend, in the last resort, on the type of rural economy which it is desired to establish. A rural economy in which the cultivator with an occupancy right is the predominant figure implies that the title normally recognized is one in which rights in the land are limited to the duration of its beneficial use, and are controlled as regards powers of transfer, though not as regards succession. The essence of a situation in which the proprietor predominates is the recognition of a right in land which is not limited by any condition as to beneficial occupation, and which the holder is free to encumber or alienate. In the conditions existing in many parts of Africa, a system of occupancy has many arguments in its favour. It constitutes less of a break with the traditional social structure and the prevailing system of cultivation; it avoids some of the dangers which flow from the unrestricted right of encumbering or transferring land; it does not prevent the eventual development of a proprietary régime, if economic conditions prove this to be desirable. The creation of this system would require the application of a different machinery in each of the fields described above.¹ In areas where the Crown retains the ultimate proprietary right over all lands it can be effected by direct state action; it is indeed already implicit in the type of right of occupancy in force in Tanganyika, the Northern Provinces of Nigeria, or the Northern Territories of the Gold Coast. In areas of the second type, notably those coming under French and Belgian law, the procedure by which registration of proprietorship² is now effected could without difficulty be em-

¹ See above, pp. 870-1.

² *Ibid.*, pp. 858 ff.

ployed for the grant of the occupancy right in cases where the state gives a title to natives over lands which it has classified as vacant or unoccupied; but it would logically require a new provision of law to give a title of occupancy where lands could not be brought under that description. In the third class of areas, such as the southern part of the Gold Coast or the Southern Provinces of Nigeria, the situation is more complicated. In some districts custom has gone far in the direction of the creation of a proprietary right vesting in the family; on the other hand, the chiefs have on occasion, as for instance during the discussions on the Land Bill of 1897,¹ shown themselves opposed to any legislation which, by recognizing rights acquired by prescription or long occupation, would curtail their authority over the disposal of land. It has been suggested that a solution of this problem might be found in legislation authorizing the chiefs to collect a seigniority due in return for their recognition of prescriptive rights, but it is likely that in the Gold Coast a revival of seigniority rights would meet with much opposition, as also would be the case in the Southern Provinces of Nigeria, where much occupied land is family land over which the seigniorial rights of chiefs are shadowy.² In any case, a legal definition of the chiefs' powers must obviously precede legislation creating or defining title in native lands.

As has already been remarked, the legal recognition of an individualized form of holding in native lands can at present apply only to a restricted area. Even in that area there is some danger in pressing the formal creation of title, lest it should cast doubt on the validity of possession elsewhere held on customary tenure; it is equally important to avoid a disturbance of social conditions by too ready acceptance of the desire of a certain section to acquire individual rights. Finally, there are areas in which caution may be necessary in view of native fears that the title may be used as a basis of taxation; in the earlier days of Indian land settlement many persons refused for this reason to have their title recorded, and in Palestine all records were for long vitiated for the same cause. The motives which prompt natives to acquire individual title, in the name of either a single person or a family, may be twofold. The desire may arise in a feeling that separate rights have

¹ See above, p. 776.

² H. L. Ward Price, *op. cit.*, 1933.

been established by custom, and that, in order to allow the land to be used to the greatest advantage, they should be confirmed by law; or it may arise simply from the need of securing the family holding from trespass, either by other cultivators or by the cattle of the community. The latter need, however, can be met, as has been shown in Kiambu and elsewhere, by encouraging the practice of constructing permanent boundaries, and of securing respect for them by influencing the native tribunals to penalize trespass. That process is, indeed, an initial and necessary step in the formal creation of individualized rights; the community, in effect, establishes its own rights, and subsequent recognition of title merely gives legal form to an acknowledged fact.

(f) *The Machinery for Recording Title*

In approaching this series of problems, administrations will be confronted not only by the need for deciding whether an individualized title is desirable, but by the need for providing a machinery for making title effective. A title can be secure, even though its only sanction be custom, so long as it is generally acknowledged and respected; but legal security against attack or disturbance can most effectively be guaranteed by registration, and this, in turn, involves a preliminary process of inquiry into the facts on which the title is claimed, and some process of survey for recording the area and boundaries of the land over which title is sought. Registration has hitherto been viewed mainly as a means of securing the possession of alienated lands; this has implied the grant of title in the clearest possible form, carrying a security which makes the property readily negotiable or available for the purpose of raising credit. For this reason, many administrations have, in granting freehold rights, accepted the principle that registration should guarantee an indefeasible title. The system by which they have been inspired was introduced by Sir Robert Torrens in South Australia about 1858 and subsequently adopted in Fiji in 1876 and New Zealand in 1885; it has had a wide extension elsewhere. Its essential feature was that it took the unit of land as the basis of record; rights were registered as attaching to the unit of land and not to the person, and it was, therefore, a measure of great convenience in early colonial conditions, which demanded a simpler

system of record than was then available under the European method, which treated rights as attaching primarily to the person. That the title recorded was indefeasible, and was guaranteed by the state against attack by third parties, was equally an advantage in those conditions, and was rendered the easier by the fact that the early colonial titles were derived from the Crown. While, however, there is little difficulty in recording and granting an indefeasible title in lands directly derived from the Crown, the process becomes more difficult where claims founded on custom or prescription have to be determined; an elaborate inquiry is necessarily required before the state can take the responsibility of guaranteeing the title which it registers.

It is essential that any system of registration, to be effective, must also provide the machinery for the ready record of day-to-day mutations on account of succession or otherwise, and such machinery takes an expensive form where the title registered is indefeasible. Further, indefeasibility of title is of lesser importance where the commercial value of land is not a primary concern. It is, therefore, a matter for consideration whether, in African conditions, it would not be preferable to adopt the alternative system under which a presumptive title only is recorded. That is the method in force in recording land titles in India; the title recorded holds good until questioned in the courts, when the burden of proof is on those who seek to contest it. Experience, however, shows that the great majority of recorded titles are never attacked, and an uncontested title acquires in time a high evidential value; it can, indeed, after a suitable period be given the legal value of prescription. Finally, where registration carries only a presumptive value, the process of inquiry before the record is made can be entrusted to a far less expert agency, and the local machinery for recording the mutations due to succession or the like is of a relatively simple character.

As has been remarked, registration of titles, to be effective, must be accompanied by some form of land survey. Where, however, the procedure of recording a presumptive title is in force, the survey can be of a simpler character than where registration confers an indefeasible title. It has already been suggested that the grant of individual title in Africa must be confined, in the first

instance, to areas where economic and social conditions render this advisable; and, even in such areas, neither the recording of title nor a land survey can be profitably undertaken until individual rights are generally recognized by the people, and the boundaries of holdings are clearly set out. The example of India, or, to take another instance, Borneo, shows that in these circumstances a plane-table field survey conducted by a subordinate and relatively inexpert agency gives sufficiently accurate results for such mapping as is required; it will be recalled that a purely African agency is at present carrying out such a survey in certain districts of the Kano emirate. It is an additional advantage, as experience has often shown, if such a field survey can be carried out within triangulation points established by expert surveyors. If a system of record of this type is to be successful, it is advisable that it should remain under government control; there are obvious dangers in the procedure proposed in certain parts of Africa, in which registration of titles would be left in the hands of native administrations.

CHAPTER XIII

AGRICULTURE

I. INTRODUCTION

(a) *The Basic Methods of Native Agriculture*

NATIVE agriculture¹ generally took the form of the shifting cultivation of subsistence crops, and the problems which arise to-day are mainly due to the changes forced on this system by the restriction of land, the stabilization of populations, the absence of large sections of the male population for long periods to earn wages, and the extension of cultivation in order to produce crops for sale.

Shifting cultivation has been described in a previous chapter as less a device of barbarism than a concession to the character of the soil.² The ground is used for as many years as it remains fertile, usually three or four years, and is allowed to revert to bush again until it has regained its fertility or until it is again required for use. Where forest land is available it is usually preferred for cultivation to secondary bush. In Northern Rhodesia, for example, the branches are lopped, carried to preserve the leaves, and laid in piles and burnt to form thick patches of ash, and in this process the whole country-side is often burnt. A newly burnt garden has been shown to contain more phosphate than an unburnt one. The amount of potash is also increased, and the reaction of the soil is changed from slightly acid to slightly alkaline.³ The effect of the burn soon wears off and a move to another forest area is then made. This type of cultivation (*chitemene*) is the most wasteful, but, as experience has taught the African that burnt forest land is particularly suited to the staple crop of small millets, it is practised throughout the forest areas of Africa, and in some areas all high

¹ As the economic questions arising out of the industries of agricultural and animal husbandry and the facilities provided for marketing are dealt with in subsequent chapters, the present chapter is confined to some discussion of the main features of African and European crops and herds and of the measures taken for their improvement.

² See Chap. I, p. 1.

³ *Report on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, p. 221. See also Chap. XVI, p. 1077.

forest has already disappeared.¹ In non-forest areas shifting cultivation has been described as a system of rotational 'bush fallows'.² Native cultivation often takes the form of 'mounding', in which weeds and trash are laid as a foundation, and which is said to be based on sound principles. These systems require large operating areas: and it is estimated that sometimes twenty years is necessary for the woodlands to regenerate.

It is an error to suppose that tropical conditions in Africa imply exuberant vegetation and rich soil.³ Save for some exceptions, limited in area, the soil throughout that part of Africa with which we are now concerned is generally poor, and soils of the arid and semi-arid regions, which make up perhaps half the total area of the continent, have little humus. In addition one or more of the elements essential for plant growth, notably calcium and phosphorus, are insufficient over wide areas, and in arid conditions 'brak' or 'alkali', usually sodium salts, form layers which are toxic to plant growth. The continuance of shifting cultivation, or its replacement by a stabilized form of peasant farming, thus depends on the introduction of systems of manuring which will both maintain fertility and also suit native conditions of life and labour, and it is clear that the first step towards the improvement of a system, which is in many areas becoming unsuited to modern conditions of African life, is the study of African methods of cultivation, and an appreciation of the effect of such methods on soil productivity. In Africa, where the more fertile soils have been discovered and developed, the value of soil surveys lies not so much in their immediate practical application as in the collection of data which will be of importance in assisting in the solution of this fundamental problem of African agriculture.

Native agriculture varies considerably in method and in crops according to the nature of the country, the possession or otherwise of stock, and the customs of the tribe in regard to food; but everywhere it is based on a simple economy in which groups of persons co-operate in a system of mutual obligations to produce the necessities of life. The duties of collaboration are divided between the

¹ See Chap. XIV, p. 985.

² O. T. Faulkner and J. R. Mackie, *West African Agriculture*, 1933, p. 44.

³ E. B. Worthington, *Science in Africa*, 1938, chap. v.

members of the household, recognized tasks belonging to the sphere of men, women, and children. The African tradition of cultivation, although empiric, teaches methods of rotation of crops, of usage of soils, and means of fertilization and even sometimes anti-erosion measures, which, though they may not be suited to modern demands on the soil, are often well adapted to the prevailing conditions of labour and climate.¹ The implements of cultivation are the hoe and axe, wielded with skill and effect. The months are marked by a routine of clearing bush or tree cutting, fertilizing, sowing of crops, fencing, and harvesting, which forms the most important activity of tribal life. Journeys are only undertaken during a period when the fields may safely be left; hunting, beer drinking, dancing, and courting are fitted in among agricultural duties. The character of the marriage relationship in various tribes and the general status of women in the community is closely related to the share which they take in the provision of food. Thus in purely pastoral tribes women exercise relatively less influence than among agricultural peoples, where the heavy work they perform is a measure of their importance in the economic system, and where they are often able to acquire property of their own by marketing crops. The agricultural system is also closely linked with the position of the political authority from which in theory every member of the community derives his right to land cultivation. In many cases the chief is responsible for carrying out regular ceremonies on which it is believed the success of cultivation depends, and sometimes for rain making in times of drought. His own fields are usually cultivated with the assistance of his domestic circle, but to enable him to carry out the duties of chiefly hospitality, his grain bins are filled by offerings of grain from his subjects' gardens or by communal labour in special gardens at his capital.²

In some areas shifting cultivation necessitates the continual removal of villages, which are often mere garden shelters. If they are more permanent and cultivation is of necessity extended to distant lands, the population moves to these gardens at suitable

¹ See C. G. Trapnell and J. N. Clothier, *The Soils, Vegetation and Agricultural Systems of North Western Rhodesia: Report of the Ecological Survey, 1937.*

² See Chap. XI, pp. 608-11.

seasons and lives in temporary shelters. The building of huts and grain bins is closely associated with agricultural work, and the problems of improved village conditions are to a great extent connected with the stabilization and improvement of agriculture.

(b) Cattle-owning Tribes

Some cattle-owning tribes, such as the Masai, Nandi, and Turkana tribes in Kenya, and the Hima tribes of Uganda, pay little attention to cultivation; among others in East, West, and South Africa the care of herds is combined with cultivation. Among the latter, cultivation is left largely to the women, the men being absent at cattle posts or left free to protect the herds against wild beasts or to indulge in hunting. In tribal conditions, domestic animals, sheep and goats as well as cattle, are regarded as family possessions, measures of social importance, inherited within the family and given to other families as pledges for the good behaviour of women on marriage or for their proper treatment by the husband and his family. Breach of faith involves the return of these animals, and often of their increase. Live-stock are used as compensation for injuries. These customs give rise to complicated litigation and react against the sale of stock and consequently encourage overstocking.¹ Animals are killed for ceremonial reasons, but otherwise are rarely disposed of; their skins were formerly used as clothing, and the family cattle are named and in some tribes even share sleeping quarters with their guardians.

Even to-day no sort of segregation or culling of beasts is practised: the majority of stock remain in poor condition and are often in a state of semi-starvation and of little value for meat. The Native Economic Commission² considered that the purely economic conception of cattle held by Europeans is disruptive of the religious ideas of the Bantu, and that overstocking will continue as long as native cattle-holding rests on a religious rather than an economic basis. The Kenya Land Commission of 1933³ remarked that in the midst of plenty natives in pastoral and semi-pastoral areas are living under conditions of extreme poverty, and money

¹ See Chap. XVI, p. 1069.

² *Report*, U.G. 22, 1932, para. 34.

³ *Report*, Cmd. 4556, 1934, para. 1989.

for food and clothing is practically non-existent and will continue to be so until the products and increase of their herds are turned into some more useful and fluid kind of currency.

The system of herding at distant cattle posts or in the open has not encouraged the use of animal manure. Thus in Nigeria, where mixed farming is more developed than elsewhere, it is estimated that over two-thirds of the manure is wasted in the bush, and among East African and Rhodesian tribes the use of manure for fertilization is almost entirely ignored.

(c) *The Introduction of New Crops and Domestic Animals*

The African bush provides a variety of edible roots, indigenous fruits, wild honey, and the meat of wild game. It is still the custom to supplement diet with these. It is, for example, thought that the wild yams of the rain forests of West Africa formed the diet of the original tribes, but it seems that many of the foodstuffs and domestic animals¹ to-day in Africa have been introduced either by migrants from the north, by the Arab and Indian traders from the east, or by the Portuguese, and in modern times by the other European settlers. The sorghums and the bulrush millets and some other cereals are, however, indigenous to Africa; native oxen, except the Hamitic long-horn cattle and sheep, came from Asia. Bananas, rice, wheat, and sugar-cane were introduced by Arabs who settled on the East Coast in the seventh century and traded with India. The Portuguese, it is believed, enriched African agriculture with groundnuts, the sweet potato, cassava, and maize, introduced from their American colonies.² These early introductions were incorporated with the system of shifting cultivation, and the staple diet became a form of rough porridge made from one or other of the grains or from the cassava root, ground by hand between stones or pounded into a mortar, and supplemented by a relish of vegetables, meat, or milk. The simplicity of this diet has made the feeding of native labour easy and economical. Among a few tribes bananas form the usual food. The introduction of cassava and sweet potatoes by the Portuguese conferred an inestimable boon on many tribes by providing them with a famine crop which will flourish under conditions unfavourable to grain crops. In 1822 the

¹ See below, pp. 929-32.

² E. B. Worthington, *op. cit.*, chap. xii.

Portuguese introduced cacao from South America to San Thomé, and later, under European administration, coco-nuts and cloves came from America and the East, and also some cottons in the form grown for commercial purposes. On the other hand, all the cultivated species of coffee are indigenous.

(d) *The Recent Development of Native Agriculture*

In areas where crops have been introduced for sale and export, such as cotton in Uganda, or cacao on the West Coast, the peasant or garden farmer grows these on a small scale alongside his subsistence crop, or sometimes combines his own efforts with a system of *métayage*, allowing tenants to cultivate part of his holding and providing them with the means of cultivation in return for a share of profits. On the West Coast, where the present type of agriculture is a crude form of peasant or small grower's agriculture,¹ the system has resulted in new conceptions of land tenure² and in the virtual cessation of shifting cultivation. Cultivation of this kind is increasing, and stimulation of native production for export, resulting in intensive cultivation, increases the strain on the fertility of the land. Again there is evidence in the Gambia, for example, that concentration on the cultivation of export crops has resulted in deterioration in the cultivation of food crops and a dependence on the proceeds of farming for the purchase of foods, and there are instances in which the peasant or garden system of mixed cultivation has gradually changed to a plantation system, notably in the Gold Coast, where native cacao farmers have abandoned food-crop production and extended cacao production on a plantation scale.

In other areas European occupation and the consequent introduction of a money economy, with demands for taxation, has had two effects. First, many cultivators were induced to grow a surplus of native crops, and secondly, large numbers of the adult male population were removed for varying periods from their traditional routine of cultivation. The extension of this additional agricultural effort naturally took place to a greater extent in areas near to European enterprise, where money could often be earned

¹ G. H. Jones, *The Earth Goddess*, 1936, pp. 96-7.

² See Chap. XII, pp. 853 ff.

as easily from cultivation as by wage earning, and where conditions were made more difficult by the restriction of native lands.

As the methods of agriculture remain those of shifting cultivation, the available soil becomes rapidly exhausted. A system which often depends upon an area of two hundred acres or more of woodland for each family cannot endure indefinitely in areas where the population¹ is increasing and forests decreasing. In areas where the sale of native foodstuffs is not possible, but the male population goes out to work, the effect is no less disastrous. The balance of native agricultural life is upset and the duties of able-bodied men fall on those less able to bear them. For example, in areas where it was customary for the young men to climb trees and lop the branches, which were piled on garden patches and then burnt to enrich the soil, trees are now more easily cut near the roots and destroyed, and the deforestation and the erosion which to some extent always accompanied shifting cultivation are accentuated.² Again, long absence of the men from their families, and consequently the difficulty the women find in making satisfactory gardens without the assistance of their husbands,³ result in the break up of home life and in the migration of women to industrial areas, where they hope to be fed on rations with their husbands or other men. The spoliation of the land by bad methods of cultivation leads to further migration among men and discourages the return of those who become accustomed to wage earning and unwilling to return to the drudgery of unprofitable agricultural effort. Nor has the introduction of ploughs always resulted in improved methods; where crops are marketable the ambition of owners is to plough as much land as possible, and the indiscriminate exploitation of land by individuals, facilitated by a system of communal ownership which allows the cultivator to move from area to area, is characteristic of some native areas near the markets.⁴ The system of shifting cultivation is strained to produce a surplus, and, without regard for the future, large areas are put under millets or maize with no attempt to follow traditional methods of rotation or mixing of crops.

¹ J. M. Davis, *Modern Industry and the African*, 1933, p. 190.

² See Chap. XVI, p. 1088.

³ *Nyasaland Report on Emigrant Labour*, 1935, p. 35.

⁴ Northern Rhodesia, *Native Affairs, Annual Report*, 1936, p. 31.

In some areas, particularly in South Africa and in the High Commission Territories, it is clear that to an increasing extent natives now consume more food than they produce. The problems arising from this state of affairs will be discussed at length in a later chapter.¹

The effect of European occupation on the cattle-owning tribes has been no less far-reaching. More stable conditions and the application of veterinary science have resulted in a rapid increase in the live-stock population, particularly cattle. The rinderpest epidemic of 1895 provided a check, and the movements of tsetse fly have eliminated cattle in some areas; nevertheless, overstocking is now general and has led to widespread soil exhaustion and erosion.² The increase in stock is also due to the persistence of the customary ideas regarding live-stock already referred to. The problem of overstocking is discussed in another chapter in connexion with erosion.³

There is little evidence that the African cultivator is so conservative as to cling to methods which are obviously unwise or to resist the introduction of new crops.⁴ His own methods have been evolved and adapted to suit local conditions and his social habits have formed themselves around them. The conception of agriculture as a profitable industry is new to a people who are accustomed to look on it as primarily a struggle to wrest sufficient food from the soil to keep themselves and their families alive. But systems of shifting cultivation have not always resulted in plenty, and periods of hunger are frequent events in the life of native tribes. Instances of a change of methods of agriculture, apart from European influence, have not been unknown in the past; thus the staple food has in some areas been changed to cassava, where the cultivation of millet has become impossible owing to lack of woodland.⁵ The production of cacao in the Gold Coast and of groundnuts in Northern Nigeria are examples of the development of new industries almost without aid, when the African has been satisfied that production is possible and within his capacity. The wide adoption

¹ Chap. XX, pp. 1405 ff.

² For a discussion of veterinary control in relation to overstocking, see E. B. Worthington, *op. cit.*, chap. xiv.

³ See Chap. XVI, pp. 1068 ff.

⁴ O. T. Faulkner and J. R. Mackie, *op. cit.*, p. 6.

⁵ J. M. Davis, *op. cit.*, p. 191.

of maize and other crops, which are comparatively recent introductions, is further evidence of capacity of adaptation. While the scientific study of tropical agriculture is still in its infancy, it is clear that the European agriculturist, by careful study of native methods and social conditions, can do much to assist native agriculture in a period of transition, and can prevent the unwise extension of the growth of economic crops.

(e) *Game as a Food Supply*

In most territories the Africans have looked to wild animals as a sure supply of meat, and in areas where the presence of tsetse-fly precludes the keeping of cattle, game meat was and is still a necessary addition to diet.¹ European penetration has not only brought restrictions and difficulties in the way of game hunting, but has also resulted in some areas in a wholesale destruction of game; thus in one district in Northern Rhodesia, since the coming of the railway and the development of the mining areas, several hundred thousand head of game are said to have been destroyed by Europeans, and indiscriminate slaughter by hunters was frequent. The destruction of game in connexion with the control of tsetse-fly will be referred to in a later section.² African methods of hunting by game-drives did in fact result in wholesale slaughter, but they were carried out during certain seasons only; again, weapons for killing were primitive, and it is said that tribal warfare in the past denied access to considerable areas which virtually became game reserves. Experience has shown that earlier methods of hunting were not so wasteful to game life as the type of hunting which now takes place by natives armed with muzzle-loading or other guns. Prevention of the destruction of game and measures for its preservation are dealt with in all territories by legislation.³ It is sufficient here to mention that the problem of ensuring the perpetuation of a reasonable quantity of wild animals, which will provide a meat supply essential to the well-being of the indigenous population, is one which in the past appears to have received insufficient attention.¹

¹ *A Report on a Faunal Survey of Northern Rhodesia*, 1934, p. 82.

² See below, p. 933.

³ See E. B. Worthington, *op. cit.*, chap. vii.

II. AGRICULTURAL PRODUCTION BY NATIVES

In most native areas the staple native food crops are maize and millets, but in some, such as the highlands of Angola, the flour of the cassava root is an important diet; in others, as in Uganda, cooked plantains are a staple food and in parts of the West Coast yam flour, but on the whole the basis of native diet is a rough porridge made from one or the other of these two cereals. In the following pages some account is given of the extent to which the more important crops are cultivated and the degree to which they have been developed for sale and export; but it has to be remembered that millets and most root crops (and in some areas maize) are grown in small gardens by families and individuals for home consumption, and that the amount grown for cash sales is small and is in most cases the surplus of the food crop. Crops such as beans and peas are primarily grown for use as relish to be salted and eaten with the porridge; this in some areas is true also of groundnuts. Native gardens contain a variety of other subsidiary crops, such as pumpkins and cucumbers, and in the environs of villages wild spinach, tomatoes, peppers, and sugar-cane are usually found. Where maize is not the staple cereal, it is grown in the early rain season as an extra crop, usually for eating in the cob before it hardens; where maize is the favoured crop, millets, such as the fine bulrush variety, are grown in small patches.

Subsidiary crops are numerous and a survey in one limited and comparatively primitive area in Northern Rhodesia identified over one hundred varieties.¹ In a number of gardens examined in Southern Nigeria, where yams are the staple crop, it was found that in 93 per cent. corn was also grown, in 99 per cent. pumpkins, in 24·3 per cent. cassava roots, in 92 per cent. groundnuts, in over 80 per cent. some variety of beans, in 90 per cent. peppers, and many have other plants. In growing these subsidiary crops the woman cultivator has a peculiar interest; most are cultivated to provide the relish dishes into which the mush or porridge is dipped, and her success as a wife and housekeeper depends on her skill in

¹ *Report*, op. cit., Colonial 145, 1938, pp. 217 ff. See also C. G. Trapnell and J. N. Clothier, op. cit., pp. 26-30.

varying diet from her gardens.¹ There is a variety of edible wild plants, roots, mushrooms, and fruits, and a familiar sight of the African bush is that of parties of women collecting these during the appropriate seasons. The sweet potato grows freely over a wide range of tropical country; it is easily propagated by vine cuttings and has a long period of growth. It is important as a standby in times of scarcity of other foods, and its trailing habit and dense foliage serve to prevent erosion; it forms a relish, like spinach, and also a supplementary cattle feed. The cultivation of European potatoes is unimportant except in Kenya, where they are grown for sale to Europeans, and in the eastern parts of the Belgian Congo, where they are said to be gaining favour as a native diet; the sweet potato is more nourishing and it would be unfortunate if it should be replaced.

Wheat is grown by Africans in the Union and in the Transkeian territories, where the General Council has provided threshers; in Basutoland 124,970 acres were estimated to be planted in 1936. In French West Africa and in the Costermanville Province of the Belgian Congo some wheat is grown, but generally speaking it is not consumed by Africans and is grown only under European encouragement for marketing. Rice, although not generally a staple diet, is important in this respect in some areas and of growing importance as a cash crop; the extent of its growth will be described later. It is necessary to describe at length the more important native food crops such as cassava, yams, ground-nuts, sesame, beans and peas, and bananas, which are assuming greater importance as cash or export crops, and to give some account of the major commercial crops grown by Africans: cotton, cacao, coffee, palm oil and kernels, tobacco and fruits.

Other minor crops, though of less general importance, are of interest and are possibly capable of further development. Thus Sierra Leone is the principal source in the British Empire of piassava fibre, obtained from the wild raphia palm, and in 1936 exported 3,558 tons. Improvement in the quality of the bark marketed has been effected by means of a system of inspection introduced under the Native Produce Ordinance.² A small

¹ See C. D. Forde, 'Land and Labour in a Cross River Village', *Geographical Journal*, vol. xc, no. 1, 1937.

² No. 16 of 1928.

amount, 455 tons, was exported in the same year from Nigeria. Native cultivation in the Central Province of Nigeria was about 100,000 acres in 1935. Cultivation is successful only at the higher altitudes, and the tree improves soil fertility and checks erosion when planted on eroded land and steep hill-sides.

Jute is an important product of the Bas-Congo, a district of the Belgian Congo; in 1936 the Maniango district produced 1,223 metric tons.

Wattle is grown in Kenya, where it was established after its successful cultivation in South Africa. Ginger thrives in West Africa. It is planted on patches of rich soil, often near villages where it can conveniently be manured; it is not of high quality but has been improved recently. In Nigeria exports have risen from 15 tons in 1930-1 to 342 tons in 1936-7. In Sierra Leone, where the quality has been improved by instruction in drying and by inspection, the crops yielded 1,642 tons in 1936. Kola nuts are chewed in West Africa by natives on account of their stimulating and sustaining properties. In former years Nigeria imported kola nuts from the Gold Coast and Sierra Leone; now internal production has increased until there is an export surplus. Cultivation has been recommended, to replace cacao in districts where the economic life of the cacao-tree has been found to be too short, and seed and plants of the better varieties have been distributed. In 1936 the Gold Coast exported 430 tons of nuts and Sierra Leone exported 2,301 tons to other West African territories: the trade in these territories has been affected by higher import duties in French West Africa and the increased production in Nigeria. French West Africa exported 55 metric tons of kola nuts in 1936.

The commercial uses of the shea nut, collected from the wild plant, have been developed in French West Africa; in the first nine months of 1937, 4,500 metric tons of nuts and butter were exported. In French Togoland a small amount of nuts was collected for export in the northern division.

Wild rubber is found in many areas, including certain of the French territories, but the export is inconsiderable. Native cultivation of rubber has been introduced in the Coquilhatville Province of the Belgian Congo.¹

¹ See below, p. 919, and E. B. Worthington, *op. cit.*, chaps. i and xii.

An important minor industry to which more attention has been given recently, for example in Northern Rhodesia, Tanganyika, and Sierra Leone, is the production of beeswax. Thus, in Tanganyika, where instruction is provided in the preparation of wax, 524 tons were exported in 1936, and in Northern Rhodesia in one district natives earn tax money by sales which are assisted by government. In Sierra Leone wax of high quality is being produced; exports from that territory rose from 15 cwt. in 1934 to 58 cwt. in 1936. Three hundred and one metric tons of beeswax were exported from French West Africa in the first nine months of 1937. Wax has a certain commercial importance in the Ubangi region of Equatorial Africa. In the Belgian Congo, efforts are being made to develop a wax industry, and exports in 1936 amounted to 115 metric tons. The collection of honey and wax is, however, sometimes accompanied by extensive burning.

As will be seen, efforts are being made to encourage the cultivation of fruit trees; in a countryside in which wild fruit abounds little interest is taken in trees of the type which need continual care. In Central Africa paw-paws and melons are grown, but the system of shifting cultivation, involving the frequent removal of villages, discourages fruit-tree planting.

In the following survey of main crops no attempt is made to differentiate between cash and food crops, and, as may be expected in the case of crops grown in mixed gardens by innumerable individuals, it is not always possible to give an approximately accurate estimate of the amount of each crop grown annually in each territory.¹

(a) *Maize*

The successful growth of maize requires fertile soil. In the Union of South Africa and in the High Commission Territories, however, where maize porridge is the main diet of the native people, it is grown continuously on the same land in all native areas whether the soil is suitable or not, usually without any attempt at rotation with a legume or root crop, and, as may be expected, the return is low and production is frequently insufficient to meet food requirements.²

¹ Much of the factual material which follows was collected by Mr. A. J. Findlay, C.M.G.

² Union of South Africa: *Report of the Department of Native Affairs, 1935-6*, U.G. 41, 1937, p. 38.

In these conditions the average output would seem to be roughly $2\frac{1}{2}$ to 3 bags an acre, as against the 6 or 7 which similar land might yield under improved methods of cultivation. In Southern Rhodesia about 400,000 acres of maize are cultivated, by natives for home consumption. The yield was estimated at over 1,000,000 bags¹ in 1936, of which about one-quarter were sold or bartered. In Northern Rhodesia maize is cultivated extensively by the cattle-owning people in the Barotse Province, on the Kafue river flats, in the Luangwa valley, and in the Fort Jameson area;² elsewhere it is usually a subsidiary crop, grown in fertile patches on plains and near rivers. Near the railway line ploughs are used³ and a considerable surplus is grown for sale; in 1936 150,000 bags were thus disposed of. In Nyasaland maize is a staple food crop; in Tanganyika maize is only second in importance to millets, and some 800,000 acres are estimated to be under cultivation, almost entirely for home consumption. In Kenya the estimated area under maize in the native reserves is 1,750,000 acres; it is one of the most important food crops and there is a surplus available for sale. In Kenya maize grows readily at all altitudes from the coast upwards, provided that the rainfall is sufficient, and in the highlands yields on an average 1,400 to 1,600 lb. per acre; but the distance from markets, and the high cost of both rail and ocean freights, discourage its growth as an export crop. Efforts are being made to improve the type grown by Africans, and the introduction of the early maturing Muratha seed, which is apparently resistant to white blight and fusarium diseases, is said to have doubled the yields of native maize in the Central Province; South African seed is also under trial. In Uganda maize is grown as a subsidiary food crop; it is planted among other crops and the cobs are picked and cooked before they are ripe. In the coastal regions of Nigeria and the Gold Coast maize is an important food crop, but, owing to the extensive growth of more profitable crops for sale, it has little importance as a crop for sale or export. On the West Coast attempts to introduce new varieties have generally failed, as the native variety can be successfully grown and is considered more palatable.

¹ Bags are usually 200 lb. in weight.

² *Report*, op. cit., Colonial 145, 1938, p. 225.

³ See above, p. 885.

In French West Africa maize is an important food crop, especially in Dahomey. An average of 450,000 metric tons of maize is estimated to be produced annually from a cultivated area of about 4,000 square kilometres. French Togoland exported 7,807 metric tons in 1936, principally from the southern areas. In the French Cameroons maize is grown in the south-west; 4,189 metric tons were exported in 1936.

In the Belgian Congo maize is a staple food. Cultivation has been extended under the 'educative' system,¹ primarily with a view to increasing the food supply. The areas required to be cultivated were increased from 85,000 hectares in 1935 to 135,000 hectares in 1936. Whereas in 1927 it was necessary to import over 10,000 metric tons of maize for consumption at the industrial centres, there was a small export in 1933, which rose to 4,214 metric tons in 1936. It is also grown as a food crop in the mandated territory of Ruanda-Urundi.

(b) *Millet*s

Millet is grown largely where conditions are unsuitable for maize, and millet flour provides a staple food for large sections of the native populations in South Africa, the Rhodesias, in the East African territories, and in the interior of West Africa. Production is almost entirely in the hands of natives. The great millet or sorghum, also known as Kaffir or Guinea corn, is the most important millet crop, but in drier areas the lesser millets, such as pennisetum, the bulrush millet, and eleusine or finger millet, are widely grown, both as pure or mixed crops. Sorghum is an important crop in the Union and the High Commission Territories, Basutoland alone producing nearly 26,000 tons; Nyasaland and Northern Rhodesia also depend very largely on millets for food. In Tanganyika they are the staple crops for food and for the brewing of beer, and are widely cultivated; it is estimated that two million acres are under cultivation and produce annually about half a million tons. Sorghum is grown extensively for food in Kenya, and in the drier parts of Uganda the finger millet is the staple cereal food crop; it is estimated that over a million acres are so planted. In Northern

¹ See Chap. XI, pp. 633-5.

Nigeria the principal grain crops are bulrush millet, or gero, and sorghum. Gero is quick-growing and requires little pre-cultivation; hence it is the first crop to be planted in fields where other crops are also grown. It is also resistant to drought and adaptable to different soils. The demand for sorghum is such that it becomes a money crop to cultivators who are favourably situated for markets. Every part of the plant is used: the flour for human food, the bran for feeding stock, the leaves for fodder, and the stalks for building houses and fences.

In French West Africa millets are the staple food throughout the northern areas, and also in the palm belt in Dahomey. An average of 30,000 square kilometres is estimated to be planted annually, giving a yield of 2,000,000 metric tons. In Togoland under French mandate, the estimated annual production is 20,000 metric tons. In the Cameroons under French mandate, millet is the staple food of the northern populations; in 1936 a single region (Logone) produced 150,000 metric tons, of which one-third was exported to Nigeria and French Equatorial Africa. Millets are important as a native food crop in Ruanda-Urundi and in some parts of the Belgian Congo.

(c) *Rice*

Native rice is grown as a subsidiary food crop in a few areas in Nyasaland and Northern Rhodesia, and also in other parts of East Africa. In Tanganyika 150,000 acres are said to be under cultivation and leave a surplus for export which in 1936 amounted to 6,513 tons and went to Kenya and Uganda. In Kenya the cultivation of rice is increasing in Nyanza and the coast provinces. Two thousand bags were exported in 1936 from the Nyanza area where, prior to 1934, no rice was grown. In Uganda 2,045 acres were stated to be under cultivation in 1936. In East Africa rice for the native people remains a luxury rather than a foodstuff. Most of the hill and dry-land rices of West Africa are derived from the indigenous African species and have a grain with a red skin which is said to make them unsuitable for export. In some areas it is a staple food, particularly in Sierra Leone, where it is estimated that 175,000 tons a year are grown, and imports have been reduced from about 2,000 tons annually to practically nil. An internal market is created by the mining industry, which consumes over 4,000 tons annually.

In Nigeria, swamp rice is grown in the river valleys where conditions are suitable. By controlling the flood water, puddling the land, and transplanting seedlings from a nursery bed instead of broadcasting the seed, the department of agriculture has obtained yields of 2 tons of paddy per acre of white exotic rice in experiments; experiments in rice-growing in mangrove swamps have also given encouraging results. In the Gold Coast, the attempt to encourage rice-growing has not met with success, and imports continue to increase, the 1936 figure being 233,666 cwts. The uniformly white type of imported rice is preferred to the coloured native varieties, and a government mill is unable to obtain sufficient quantities of local paddy for full working capacity.

In French West Africa the average area annually planted with rice throughout the whole federation is 4,000 square kilometres, and the yield is estimated to be about 400,000 metric tons. It is the principal crop grown in the irrigated area at Baguinéda in the Niger delta,¹ which is expected to carry 5,000 hectares. The marsh rice, 'dici', has recently been introduced from India for planting in the swamp areas, and 'fossa' for inland cultivation. At Kokry, in the Sansanding irrigated area, about 8,000 hectares of rice are expected to be planted. The population of Senegal, which at present imports 50,000 metric tons of rice, is regarded as the most hopeful market. At the Diré Company's concession near Goundam, where each native cultivator is required to plant one hectare of millet and one of rice as food crops, the yield of rice is 2,400 kilos per hectare. Rice is a traditional native food crop in the Casamance valley of Senegal and in Guinea, where it is grown together with maize in regions liable to seasonal flooding. Cultivation for export has recently been stimulated in Guinea.

In the Belgian Congo 4,933 metric tons of rice were imported in 1927; local cultivation for sale to the industrial centres has since been encouraged, particularly in agricultural areas close to these centres, and in 1936 1,173 metric tons were exported.

(d) *Cassava (Manioc)*

Cassava is a staple food in many of the tropical and sub-tropical areas of Africa and its cultivation is widely encouraged as a

¹ See Chap. XV, pp. 1050 ff.

food reserve crop in case of scarcity. It is not universally popular and some tribes are ignorant of the methods of preparing the root, or dislike cassava as a food; the starchy porridge made from the cassava flour is said to be more filling than nourishing. There are two distinct varieties, the bitter and the sweet; the root of the bitter variety contains cyanogenetic glucoside which develops hydrocyanic acid;¹ in the sweet variety the glucoside is confined to the skin. Thus, the roots of the sweet variety, when skinned, can be eaten raw, while the bitter variety has to be soaked in water or cooked to dissipate the poison. Cassava is comparatively free from pests and diseases but is subject to a virus disease known as mosaic, which has increased in recent years.

In West Africa cassava, which is grown commonly in the rain forest area, is generally planted on ridges as the final crop before the farm is abandoned, and left to fend for itself. It is also grown on land in the vicinity of large towns where no other crop will grow. It was considered at one time to be an exhausting crop, but experiments in Nigeria have proved that it is not so, if the stems and leaves are not removed from the land.

In French West Africa, where it is grown particularly in Dahomey, the average annual crop is one million tons from a cultivated area of 4,000 square kilometres. In the mandated area of Togoland an export of tapioca made from the cassava root began in 1932 with the small quantity of 6 metric tons; 1,083 metric tons were exported in 1935, but the figure fell to 466 on account of drought in 1936. In the Cameroons cassava is grown as a food-stuff in the forest and savannah zone, and the Doumé subdivision in 1936 produced a surplus for sale to mines at Bétaré-Oya. In the northern areas the cultivation of manioc is encouraged as a precaution against famine due to locust invasions.

In Ruanda-Urundi certain regions have been found unsuitable for cassava, but cultivation is being extended elsewhere. Over 5,000 cuttings of varieties resistant to mosaic disease were distributed in 1936.

(e) *Yams*

The term 'yam' is sometimes used to include all the tropical tubers, but strictly speaking it should be applied only to varieties

¹ See E. B. Worthington, *op. cit.*, chap. xii.

of *Dioscorea*, the big yam, which is cultivated in tropical Africa, principally in the coastal regions and middle belt of West Africa, where it is a staple food crop. In most parts of East Africa the rainfall is inadequate for yam cultivation. In typical yam-growing areas only good land is used and cultivation is carried out carefully, a usual practice being to plant on mounds of soil or in well-made ridges; in some cases the mounds are about 4 or 5 feet high and correspondingly broad. Under good cultivation huge tubers weighing 50 to 60 lb. can be produced. In all yam fields other crops are interplanted on the sides of the hills or ridges, and it is seldom that two crops of yams are taken off the same land in succession. Yams are exported from French Togoland; in 1936 the amount exported was 258 metric tons.

Coco-yams (*colocasia antiquorum*) are widely cultivated in the wetter areas of tropical Africa, but are usually regarded as being of secondary importance, and do not occupy any specific place in systems of cultivation, being often planted in odd pieces of land and under the shade of trees where few other crops will thrive. Their tolerance of shade allows them to be grown as a catch crop and ground cover under permanent crops, but in the forest areas of south-eastern Nigeria and the British Cameroons they are an important food crop. They are not related to the *Dioscorea* yams, and it has recently been found that the bulb contains toxic substances.

(f) *Groundnuts*

Groundnuts can be grown as an annual crop on light soils in almost any tropical or sub-tropical country, and cultivation in Africa extends from the Gambia all along the West Coast across Central to East Africa and down to the Union. The groundnut is valued as a foodstuff, and its oil for domestic purposes; and it is said that more extended use would remedy deficiencies in native diets. The plant acts as a soil renovator, and the haulms are a valuable addition to the fodder supply in mixed farming. In Kenya, Nyasaland, and Northern Rhodesia all production is absorbed by local requirements. In Northern Rhodesia, for example, the local demand at the mines has to be supplied by imports from outside the territory.

In Tanganyika the amount exported varies widely with season and price. It is estimated that in 1936 there were 290,000 acres under groundnuts. In Uganda cultivation is estimated at 167,124 acres, but exports were only 1,465 tons in 1936. Marketing arrangements are in the hands of a single firm licensed under the Native Produce Marketing Ordinance¹ for three years. Experiments on inter-planting with cotton have given good results and show a possible way of increasing production without diminishing the cotton acreage. Export production in Nigeria is almost entirely confined to the drier areas of the Northern Provinces, especially in Kano Emirate. In 1936, 218,389 tons were exported, or 18 per cent. of the total exports: only undecorticated groundnuts are exported from the interior. Production costs in this crop have to be kept low, as high transport charges have to be met, owing to the great distance from the port. In the Gambia the export of groundnuts amounted in 1936 to 49,654 tons, or over 95 per cent. of total exports. The industry is over a hundred years old, for there is a record of an export valued at £838 in 1836: here again only undecorticated nuts are exported. French West Africa is the leading exporter of groundnuts in Africa, the total exported in the first nine months of 1937 having been 395,000 metric tons of undecorticated, and 123,000 metric tons of decorticated nuts. Senegal is the principal source, and the impoverishment of soil in the Rufisque district through over-production has led to experimentation with manures in the central belt, which is now the main producing area. In the extreme north the control of flood-waters and the construction of irrigation canals are also under consideration.² In Togoland the communal cultivation of groundnuts was first organized in 1935 through the medium of the *sociétés de prévoyance*.³ In the Mango subdivision in the extreme north this represented the first introduction of the population to a money economy, and rivers are being specially bridged to allow for the transport of the crop. The exports in 1935 amounted to 1,394 metric tons, mainly from the northern areas; in 1936 a large proportion of the crop was lost through drought.

Groundnuts are also exported from French Equatorial Africa,

¹ Ordinance 20 of 1932.

² See E. B. Worthington, *op. cit.*, chap. xii.

³ See Chap. XXI, pp. 1477 ff.

but high transport charges make cultivation unprofitable in the interior; in the French Cameroons cultivation is encouraged only in regions unsuitable for oil palms: an excellent quality is obtained from the northern area, and in 1936, 12,294 metric tons were exported.

Exports from the Belgian Congo began to be important in 1934, and attained 6,368 metric tons in 1936. This crop is, however, held to be primarily valuable as an addition to native diet, and cultivation is encouraged largely for this reason; the area required to be planted was increased from 37,600 hectares in 1935 to 102,000 hectares in 1936. Groundnuts are also sold to the mining areas. In Coquilhatville Province the crop is grown in rotation with cotton. It was introduced in the mandated area by means of free distribution of seed in 1935; cultivation is spreading, but only for food.

(g) *Sesame (simsim)*

Sesame (*Sesamum orientale*), also known as simsim and benniseed, is grown in both East and West Africa: it grows freely in areas where the rainfall is moderate. The seed contains oil which can be used as a substitute for olive oil, and is used in native food; it is much used as a relish. In East Africa oil is produced in Indian-owned crushing mills often operated by camel power. In Tanganyika, where in some areas this is the staple crop, steps are taken to ensure supplies of pure white seed, which commands a premium over coloured kinds. In Kenya the Nyanza Province is the main source of supply, and cultivation is being encouraged in the Coast Province, where introduced white-seeded varieties are under trial. In 1936, 3,958 tons of seed and 85,455 gallons of oil were exported from Kenya. In Uganda this crop is of greatest importance in the Northern Province, where it is grown for sale when prices are favourable. In Nigeria the establishment of an agricultural station in the Benue Province in 1924 gave an opportunity for combined efforts of trading firms and the Department of Agriculture to encourage and extend the cultivation of benniseed, which is the money crop of the Munshi farmers:¹ as this area has no other cash crops, cultivation is likely to be extended in spite of

¹ O. T. Faulkner and J. R. Mackie, *op. cit.*, pp. 127 ff.

low prices. Nigerian exports have risen from less than 2,000 tons in 1924 to 13,186 tons in 1936, and quality has been raised by the distribution of pure seed. Production in the Northern Territories of the Gold Coast is for local consumption. Sierra Leone exported 409 tons in 1936. French West Africa in 1936 exported 868 metric tons of sesame; in the French Cameroons it is cultivated in the savannah region, where no other oleaginous plants will grow, and white-seeded varieties are being introduced; exports in 1936 were 1,079 metric tons.

(h) *Pulses*

Pulses such as beans and peas include a very large class of leguminous crops that are widely cultivated for food purposes with occasional small surpluses for export. The favourite cowpea (*Vigna unguiculata*) is to be found growing in most native gardens in tropical Africa, and the tall pigeon pea (*Cajanus Cajan*) is common. In the Union of South Africa beans are increasingly grown as a subsistence crop in the high veld districts and the coastal areas of Natal and the Ciskei, and their introduction has been recommended in Bechuanaland for late planting.¹ In Swaziland the principal legume grown for food is the nhlubu bean.² Throughout East Africa beans and peas of all sorts are consumed locally. In Kenya imported varieties of beans are grown in the highlands, and tepary beans do well in the coastal area; the export of beans was nearly doubled in 1935, largely owing to the new system of inspection, whereby samples containing over 75 per cent. of one variety were picked over until they were pure. A valuable export trade with South Africa has been established with the Rose Coco and Canadian Wonder varieties, and in some districts beans are found to be a more profitable crop than maize for native cultivation.

In West Africa the phaseolus bean is said to have been cultivated for over a thousand years, and recently a variety has been produced that may fulfil successfully the dual purpose of a green manure and a food. Various pulses are grown throughout the French

¹ *Report on the Financial and Economic Position of the Bechuanaland Protectorate*, Cmd. 4368, 1933, p. 139.

² *Report on the Financial and Economic Situation of Swaziland*, Cmd. 4114, 1932, p. 145.

colonies, and French Togoland in 1936 exported 34 metric tons of haricot.

The soya bean, which would form a valuable addition to native diets, has been tried in South and Central Africa with doubtful success, as conditions do not appear to be suitable. It appears, however, that some areas in the East African highlands and in Nyasaland are suitable for a special variety bred with regard to local conditions.

(i) *Bananas and Plantains*

Bananas and plantains are cultivated very extensively in Africa where climatic conditions are suitable; they thrive best in areas of high rainfall, but will grow where the rainfall is as low as 20 to 30 inches. In this discussion the term 'banana' is applied to the sweet fruit, and plantain to the variety which requires cooking. For native consumption the plantain is the more widely cultivated, and in some parts constitutes the staple food crop; thus in Uganda over a million acres are under this crop. In Tanganyika the estimated area under plantains and bananas is a quarter of a million acres. Farther south conditions generally are said to be too dry for successful cultivation, although there is a considerable production of bananas of indifferent size and quality in the coastal belt of Natal. In the southern portions of the Gold Coast, Nigeria, and particularly the Cameroons, there is a big consumption of plantains, often as supplementary to yams.

Bananas and plantains for native consumption are frequently planted in and around villages, where household refuse serves as manure, and are sometimes interplanted with permanent crops and used for shade purposes with coffee and young cacao. The stools are allowed to multiply almost indefinitely, and the result is often a veritable forest of plants. In some areas a flour useful for native bread-making is prepared from dried plantains, and liquor is extensively brewed and distilled from plantains and bananas, but there is no commercial preparation of banana fibre in Africa.

Before 1914 the German administration had organized an export trade in fresh bananas from the Cameroons, but it was not until after the War that other West Coast countries considered the possibilities of such a trade. Some of the big fruit companies

operating in the West Indies and South America explored the West Coast, but found that conditions in the British areas were not suitable for production on the large scale which they desired. In 1933 the Gold Coast Government arranged some trial shipments. The results were encouraging, and after an unprofitable period shipments are now said to show some profit, but poor soil and lack of attention are responsible for a high proportion of small bunches, and it is held that the export trade is unlikely to be successful unless larger bunches can be produced.¹ A survey of soil conditions has been made by the Agricultural Department, and farmers are advised of suitable areas.

There has been greater success in organizing the export trade from French territories. French West Africa in the first nine months of 1937 exported 35,000 metric tons of bananas. Commercial cultivation of bananas was introduced into the French Cameroons in the coastal region in 1932, largely on estates originally held by Germans; it has been extensively developed both by natives and Europeans, principally in the neighbourhood of the railway. There is now a regular steamer service for the export of the fruit, and the exports for 1936 were 16,865 metric tons. There is a large export of bananas from the Cameroons under British mandate.

(j) *Cotton*

Indigenous African cottons exist, but the cotton of commerce has been derived from American long-stapled varieties introduced at various times since the beginning of the twentieth century. The climatic conditions required by cotton are moderate rainfall during the growing period, and dry weather for the setting and ripening of the bolls; if the rains last too long or stop too early, crop yields are seriously affected. Cotton is grown in some areas as a mixed crop and often planted in the same gardens as the staple food crops; its development as a native crop is due to the ease with which cultivation can be combined with that of subsistence crops. It is believed to have possibilities as a native crop in portions of Natal and the inland districts of Zululand, but development depends on

¹ F. A. Stockdale, *Report on his Visit to Nigeria, Gold Coast and Sierra Leone, 1935-6*, C.A.C. 270, 1936, pp. 69-72.

further research; it is thought possible that some form of collective production might be introduced.¹

It was decided in 1935 to stimulate the cultivation of cotton by natives in Southern Rhodesia, and in 1936 it was introduced as one of the four-crop rotations in school demonstration plots. The Cotton Research and Industrial Board distributed seed and has agreed to buy the crop. Experiments with cotton as a native crop have been under trial in Northern Rhodesia since 1932: an output of some 4,000 bales is regarded as possible. In Nyasaland the original introduction was Egyptian seed, later replaced by American Upland; the type now grown is derived from the American strain, U₄, introduced from South Africa. It is estimated that there are 82,000 acres under native cultivation, which produced for export 13,301 bales and 1,629 tons of cotton seed in 1936. Following on a visit of Professor Munro to advise on insect pest control, much caution is advised in the extension of cotton growing in Nyasaland until more is known about cotton pests, particularly red bollworm.

In Tanganyika exports of cotton grown by native peasant farmers show a remarkable increase from 13,587 bales in 1931 to 63,130 in 1936, and increases are expected to continue, but yields of seed per acre are considerably lower than in Uganda. Tanganyika depends on cotton strains from Uganda and Nyasaland.

In Kenya cotton is entirely a native crop: it has been exported in small quantities for many years, but not until 1930 was there a definite increase in cultivation followed by a steady expansion. Thus in 1930-1, 783 bales of 400 lb. each were produced, and in 1935-6, 16,165 bales. Cotton is now the chief cash crop in the native reserves in the Nyanza Province and the coastal belt. It is being tried in the lower-lying parts of the Central Province, but generally cultivation is restricted to levels below 4,500 feet. Twelve ginneries were in operation in 1936. In the Nyanza cotton area strains from Uganda have been successfully introduced. In some areas cotton has been satisfactorily worked in with food crops, but in others it is causing over-cropping, and where it is grown on hill slopes it is said to be responsible for soil erosion.²

¹ Union of South Africa, *Report of the Department of Native Affairs, 1935-6*, U.G. 41, 1937, p. 39.

² See Chap. XVI, p. 1100.

The remarkable development of the cotton industry in Uganda in recent years has been made possible by the extension of the railway and by the development of roads. The first recorded export of a few hundred pounds of lint was in 1902, and it was not until 1906 that an appreciable export of 500 bales was made; from that time development was rapid, reaching 20,000 bales in 1911 and 316,000 in 1935-6. There appears to be no evidence of indigenous cotton in Uganda; the existing native cotton was introduced by Arabs. Sir Samuel Baker introduced Gallini cotton in 1872, but there is no trace of further introductions until 1903, when Egyptian and American Upland varieties were introduced for trial. Egyptian cotton did not do well and it was decided in 1907 to restrict importation to American varieties. Between 1903 and 1910 Buganda was the principal producing area with about 22,000 acres. Between 1911 and 1920 standard varieties were adopted and the industry was developed on the basis of the American Upland varieties Allen and Sunflower, the latter being generally adopted before the end of the period. From 1921 onwards local selected varieties were adopted for general cultivation, beginning with selections from Nyasaland Upland, which had been introduced for trial in 1915. These were line selections from a mixed crop of long staple Upland, with Florodora predominating. Subsequently various introductions were tried and discarded, and in 1929-30 came the varieties U₄ and U₄/4/2 bred by the Empire Cotton Growing Corporation at Barberton in South Africa; the latter is the parent of many selections now being cultivated. Cotton is grown mostly in the Eastern, Buganda, and Northern Provinces, where there is a rainfall of about 50 inches. In the Eastern Province the extension of cultivation has led to the widespread adoption of ploughing, to an extent which is producing exhaustion of the soil.¹ In the Buganda Province yields have been falling off, and it is suspected that this may be due to soil erosion resulting from cultivation on steep slopes, since experiments in America have shown that cotton grown on eroded soil is inferior. The first power gin was established at Kampala in 1906, and by 1914 there were 20 ginneries working. There are now 194 ginneries, of which 59 do not operate, but serve as buying centres. The pro-

¹ See Chap. XVI, pp. 1099-101.

ceeds of the export tax, imposed in 1919, were at first devoted to the development of the industry, but now go to the general revenue. The principal markets are in Bombay and Japan. Uganda cotton enjoys a premium over American middlings, but this may be lost if the standard is allowed to deteriorate through the mixing of strains. Both here and in Tanganyika efforts have been made to find local markets for cotton-seed oil, so that seed, which is at present destroyed when prices are low, may be used as a fertilizer. It has been suggested that cotton-seed oil may be used as fuel for Diesel engines, and the appointment of a chemist to undertake research on the subject was recommended by the Uganda advisory committee for the development of native agricultural production.¹

In Nigeria cotton has been grown from time immemorial to supply the demands of the native hand-spinning and weaving industry, but the great bulk of the export production comes from the Zaria and Sokoto Provinces in the north, where American cotton, Allen's Long Staple, has practically replaced the native variety. In the Southern Provinces an improved native type known as Ishan is used. In 1925-6, when the price paid for seed cotton was 2½*d.* per lb., the production was 37,356 bales, but this level was not reached again till 1934. In 1935-6 about 50,000 bales were purchased at 1½*d.* per lb. The average yield in Zaria is said to be 150-180 lb. an acre, but on well-manured land 450 lb. has been reached. It is interesting to note that prices in the local markets throughout Nigeria for cotton for spinning and weaving are often above export prices.

In French West Africa cotton is one of the principal crops grown on the irrigated lands in the Niger basin;² the *Association Cotonnière Coloniale* supplies selected seed and sometimes buys the crop as agent for the government at a guaranteed price of 0.90 frs. a kilo, with a bonus when the market price is high enough. The cotton supplied is 'improved Allen' from Nigeria, which is also used in the northern regions of Dahomey; experiments are also being made with Peruvian types. Native cotton is sold in the open market: it is of short staple and gives a percentage of about 25 in ginning.

¹ *Report of the Sub-Committee on Utilization of Cotton-seed, 1936.*

² See Chap. XV, p. 1050.

The Diré Concession was originally granted for cotton in 1919, but serious development began only in 1930.

Four cotton-buying companies operate in French Equatorial Africa, where production, largely stimulated as an 'educative' process, attained 16,600 metric tons in 1934-5. It was announced in 1935 that the maximum area had been brought under cultivation and attention would be directed to increasing yields. A type of American Upland is used and the crop is grown mainly in the Ubangi-Shari region, where soil and climate are most suitable. It is exported by the Niger route, which is open only for two or three months in every year.

In French Togoland cotton is grown in association with yams in the central plateau area; in 1936, 1,515 metric tons were produced. It is regarded, with groundnuts, as the most hopeful cash crop in the north of the Cameroons, but has only recently been introduced: in 1936, 69 metric tons were exported.

In the Belgian Congo cotton was the first crop to be introduced by the method of 'educative' cultivation imposed in 1917.¹ The Administration fixes the purchase price. The principal company, the *Compagnie Cotonnière Congolaise*, founded in 1920, undertakes ginning and marketing. By 1936 there were 125 ginneries in the Congo. The extension of cotton cultivation is still being actively pursued. The chief producing areas are in the valleys of the rivers Uélé and Ubangi in the extreme north, and Sankuru and Kasai in the south. The highest average yield in 1936 was given as 410 kilos per hectare in some parts of Tshofa Territory in the Lusambo Province. Total production for that year was 89,574 metric tons from a cultivated area of 304,302 hectares; of this 26,485 metric tons was exported. In the mandated area cotton is grown in the Ruzizi plains and around Usumbura, and in 1936, 11,000 native planters cultivated about 3,300 hectares. The average yield was said to be 608 kilos per hectare, and the total production 2,010 metric tons.

(k) *Cacao*

The cacao tree, *Theobroma cacao*, a native of the tropical forests of Central and South America, requires a high temperature and

¹ See Chap. IX, p. 634.

a humid atmosphere, and flourishes under West African conditions. It was first brought from America to San Thomé by the Portuguese, and afterwards established on the mainland, first on the Gold Coast and later in Nigeria; Sierra Leone produces a negligible amount, but French West Africa (the Ivory Coast) is exporting an increasing quantity. Cacao is native grown, except in the Cameroons, where large plantations, some of which continue to be exploited by European owners, were established under the German administration. It does not thrive in East Africa, which is too dry, but attempts have been made to establish it in Tanganyika and a few tons are exported from one plantation.

The cacao industry in Nigeria has not been developed to the same extent as in the Gold Coast, although production rose from 33,934 tons in the 1926-7 season to 70,000 tons in 1936-7, as conditions are only suitable in areas in the west of the territory. In the palm belt the soil conditions are unfavourable and the trees quickly deteriorate and die back before they are 18 years of age. The original exports, which were almost entirely unfermented and often badly dried, were said to be the poorest quality on the world market, but considerable improvement was made through the organization, by the Department of Agriculture in 1922, of fermentation centres on which the introduction of the co-operative movement to Nigeria was based.¹ In the mandated area of the Cameroons native production is mainly in the Kumba District, where there is a large co-operative marketing union,² and in 1936 it amounted to two-thirds of the total output.

The Gold Coast cacao crop for the seasonal year 1935-6 constituted a record at 285,351 tons. This large crop, which supplies nearly half of the world's demands, is produced from the forest belt, where its cultivation occupies about 950,000 acres, and the development of the industry has been so rapid and successful that it has over-shadowed other agricultural activities, and caused a disproportionate concentration on a product confined to a limited area, and employing only a small proportion of the total population. In the Gold Coast cultivation is almost exclusively in the hands of peasant farmers, and it is estimated that there must be over a quarter of a million cacao farms varying in size from about

¹ See Chap. XXI, p. 1474.

² *Ibid.*, p. 1475.

2½ to 6½ acres. As in other areas, the source of labour is usually the owner's family, but labourers, generally from the Northern Territories, are employed on the larger farms. As little attention is paid to cultivation, and pruning is neglected, and no attempts at drainage are made, production costs are kept at a low level and producers have been able to compete successfully in the world market.

The type of plant cultivated, the yellow podded Amelonado, is uniform and yields well over 500 to 600 lb. of dried cacao per acre. The crop is harvested at two seasons, the main season from August to January, and the mid-season in May and June. The ultimate quality of the crop depends almost entirely on the care which is exercised during the fermentation, although drying, which is done in the sun, is also important. The standard Gold Coast product is not a cacao of high intrinsic quality like the Criollo of Venezuela and Trinidad; the big demand for it is due to its use as the basis of cocoa mixtures, the higher grade cacaos being used in smaller quantities for improving the blend, in accordance with the quality required in the final manufactured product.

Towards the end of 1937 the majority of firms purchasing cocoa on the West Coast entered into an agreement regarding the terms of purchase, which was designed to prevent competition raising the local price above world price. The African growers, however, considered this to be detrimental to their interests. Cocoa was withheld from the market by growers in the Gold Coast and in Nigeria, who showed a remarkable degree of unanimity in what they considered to be their interests, and a Commission of Inquiry was appointed by the Colonial Office to examine and report on the marketing of cocoa in the Gold Coast and Nigeria, with special reference to the buying agreement entered into between certain firms. It is interesting to note that the agitation on the part of the peasant producers also took the form of a boycott of imported goods.¹

In French West Africa the estimated area annually cultivated with cacao is 1,500 square kilometres; the exports for the first nine months of 1937 were 42,000 tons, mainly from the Ivory Coast and the southern part of Dahomey. In the French Cameroons cultiva-

¹ *Parliamentary Debates, House of Commons*, vol. cccxxxv, no. 103, May 4, 1938, c. 836.

tion is still being extended and a programme of replacement of old plantations by new trees is in force; exports for 1936 were 23,808 metric tons.

In the Belgian Congo efforts made by *Inéac*¹ to form cacao plantations at Gazi have not as yet met with much response from native cultivators.

(1) Coffee

Coffee is scarcely used as yet by the Africans as a beverage and is grown almost entirely for sale. In Uganda, for example, local usage is confined to chewing the berries, which have a certain ceremonial importance and are offered to guests by persons of standing. The three major varieties,² *arabica*, *robusta*, and *liberica*, are native to Africa; *arabica* from the mountains of Abyssinia, *robusta* from the Congo, and *liberica* from the forests of West Africa. A minor variety, *stenophylla*, belongs to the highlands of Sierra Leone. The *arabica* variety produces the best quality coffee and is most widely cultivated, thriving best at heights above 2,000 feet. It needs better soil and more careful cultivation than the other varieties, which are hardier and do best from 2,000 feet down to sea level. *Robusta* produces better quality coffee than *liberica*, which is classed as coarse coffee, and grows best in humid climates, producing heavy crops of large berries.

Coffee has recently been encouraged in Nyasaland as a native crop by the distribution of *arabica* seedlings in certain areas, but it is held that the long dry season will prevent development on a large scale. As shown below, European production has now greatly declined. In Tanganyika, native and European production are not distinguished in official returns; the total area under coffee is estimated at 119,000 acres; and exports have increased from 9,251 tons in 1931 to 12,146 tons in 1936. Of this 6,504 tons, two-thirds *robusta* and one-third *arabica*, came from the Bukoba District where the crop is mostly native-grown. Owing to water shortage pulping is not done; the cherries are dried whole and the beans subsequently extracted by hullers. In the Moshi area native growers are organized in the Kilimanjaro Native Co-operative

¹ See below, p. 953.

² Imperial Economic Committee, *19th Report*, June 1930.

Union, and coffee grown in the Songea area is marketed by a co-operative society registered in 1936.¹ *Arabica* coffee-growing by Africans has recently been permitted in experimental areas in Kenya, in the Central and Nyanza Provinces; the full permissible acreage has not yet been reached. The Agricultural Department is conducting experiments with *robusta* coffee, as it is hoped that this type will prove a useful native cash crop.

Coffee cultivation in Uganda is carried on by both European planters and native peasants, principally in the Buganda, Western and Eastern Provinces, both *arabica* and *robusta* varieties being grown according to the suitability of climatic conditions. The share taken by Europeans in production is explained below; native interest in the crop began about 1922. The coffee industry has shown considerable expansion in recent years, exports having risen from 87,000 cwt. in 1932 to 228,783 in 1936. About three million seedlings are distributed annually by the Agricultural Department, of which 50 per cent. are said to survive after planting. In 1936 there were 17,066 acres of *arabica* under cultivation by natives out of a total of 23,252, and 27,171 acres of *robusta* out of a total of 34,457. Mulching with plantain and banana leaves is encouraged, and the results have been satisfactory not only in the effect on the coffee bushes but in arresting soil erosion.² Systems of pruning have been investigated and in one area natives trained as pruners are doing useful work. Instruction is also given to Africans in methods of control of the main coffee pests (antestia and mealy bug).

Production in British West Africa is confined to Sierra Leone and the Gold Coast: the former exports a few tons, the latter has so far consumed its production locally; the variety grown is *robusta*.

In the French territories *robusta* is the most widely grown variety. In French West Africa the total cultivated area of coffee is estimated at 700 square kilometres, and exports in the first nine months of 1937 amounted to 9,500 metric tons. In French Togoland cultivation is being stimulated; in 1936, 120,000 trees were planted in the southern division and 500,000 in the centre, and the export was 162 metric tons. In French Equatorial Africa,

¹ See Chap. XXI, p. 1473.

² See Chap. XVI, p. 1101.

robusta coffee planting is stimulated; plantations on the river Ubangi and the upper reaches of the Sangha are already in bearing, and in the first nine months of 1935, 820 metric tons were exported. In the French Cameroons native growers had planted over 4,500,000 trees by 1936 under administrative supervision and the export was 2,015 metric tons.

In the Belgian Congo coffee plantations made under the 'educative' system¹ covered 2,976 hectares by 1936, mainly in the Stanleyville Province; by 1936 a total of 627 hectares had been planted voluntarily by natives in the Costermansville Province. Coffee was introduced in Ruanda-Urundi in 1931, and by 1936 over 18,000,000 trees had been planted; the banana groves with their accumulated humus have been found useful in connexion with the plantations. Production has risen from 70 metric tons in 1931 to 1,200 metric tons in 1936.

(m) *Palm Oil and Kernels*

Palm oil and palm kernels² are derived from the fruit of the oil palm; a fibrous pericarp contains the oil and covers the shell, which is cracked to obtain the palm kernel of commerce. In West Africa the edible pericarp oil is extracted by crude methods and the nuts are cracked by women and children; palm kernels are not used by the Africans, but exported to Europe for crushing, and the oil is used largely in the manufacture of margarine and soap. British West Africa is the largest producer in the world and, except for a few European plantations, production is in the hands of Africans.

In the early history of Nigeria palm oil and kernels were brought down the rivers and creeks to be traded on the coast; hence the origin of the name 'Oil Rivers' applied at one time to the Niger delta. The trade continued to develop as the country was opened up. It was thought at one time that the industry was so well established as to be unassailable, but about 1922 the exportation of an oil with a lower percentage of free fatty acid than the Nigerian product was begun from Sumatra and Malaya. The

¹ See Chap. XI, pp. 633-5.

² Empire Marketing Board, *Survey of Vegetable Oil Seeds and Oils*, vol. i, 'Oil Palm Products', June, 1932.

superior quality of the oil from the Dutch East Indies now makes it a strong competitor with that from British West Africa. A scheme for the improvement of existing palm groves, the planting and cultivation of selected types, and the use of hand-power presses to improve the quantity and quality of the oil, has been introduced by the Agricultural Department in Nigeria. The ultimate object is the complete replacement of wild by cultivated palms, but progress is necessarily slow as it is difficult to persuade the natives to depart from their old-established methods, and more difficult still to make them realize the dangers from outside competition. They are averse from cutting down old trees, and by native custom this cannot be done without the consent of all members of the group which jointly owns the plantation. In 1928 there were only six native owners cultivating 21 acres of oil palms under the scheme, while in 1936 there were 2,278 owners of 4,172 acres; but the rate of progress will not be regarded as satisfactory until it reaches 10,000 acres per annum. The Agricultural Department's farms are said to be unable to produce adequate supplies of seed, the germination of which is slow and uncertain. The production of palm oil entails a considerable amount of labour and is influenced by prices, years of low prices showing definite declines in quantities exported, and in order to compete with the East, exporting companies have installed bulking plants at several ports.

It was thought at one time that the future of the industry lay in the establishment of central oil mills to treat raw material purchased from the natives, but, as shown elsewhere, the scheme proved unsuccessful.¹ To encourage the use of the hand press, the Cultivated Oil Palm Ordinance² provides for a rebate of the export tax to those owners of plantations who use a press; in 1932 there were 58 presses in use, and by March 1937 the number had risen to 453. The native administrations actively assist in schemes for the improvement of the industry.

As little use is made locally of palm kernels the export figure—386,145 tons in 1936—represents almost the total annual production.

In the Gold Coast oil-palm products were the staple agricultural export before the development of the cacao industry.

¹ See Chap. XX, p. 1402.

² No. 17 of 1935.

Falling prices and the superior attractions of cacao cultivation caused the oil-palm industry to decline, and as recently as 1933 exports fell to 10 tons of oil and 2,493 tons of kernels; in 1936 exports rose to 442 tons of palm oil and 12,562 tons of palm kernels. The industry is said to be capable of considerable expansion by fuller exploitation of existing palm-bearing areas, but the cocoa trade is found more profitable, nor would labour be available for the less popular industry at the present time. It appears, however, that much could be done to prepare for expansion by organizing the thinning and replanting of existing palm groves, by supplying improved planting material, and introducing better oil-extraction methods, on the lines which have proved successful in Nigeria. There are two power mills in existence which are capable of dealing with increased supplies of raw material. The production of palm oil for consumption in parts of the country which do not carry oil palms is probably of greater importance than the export trade, owing to its dietetic value to the native population.

The importance of the oil palm to Sierra Leone is reflected in the record export of 84,578 tons of palm kernels in 1936, in addition to 1,222 tons of palm oil, and the export duty on kernels provides considerable revenue to the colony. The small proportion of oil to kernels exported indicates that there is a large consumption of palm oil for food purposes. The fruit of the indigenous Sierra Leone palm yields relatively little oil, breeding is now confined to imported varieties, and it would seem that an extensive system of district nurseries is necessary if the inferior palms are to be replaced.

In French West Africa the estimated annual production of palm nuts and palm oil is 120,000 metric tons. The principal producing areas are the Ivory Coast and Dahomey, and in the latter thirty machines for breaking the kernels are in use. In 1937 proposals were made for the protection and improvement of selected areas of wild palm plantations and the increased provision of centres for treatment and of means of transport.

In French Togoland the oil palm is an important source of revenue in the southern areas. Production of palm nuts in 1936, at 21,505 metric tons, represented 40 per cent. of the total production

for the territory. Palm oil exports reached a maximum of 3,348 metric tons in 1924; the 1936 figure was 3,281. Twenty-two mechanical crushers, provided by the local *sociétés de prévoyance*,¹ are in use, of which twenty have been mounted on lorries and can be moved from village to village. French Equatorial Africa produced, in the first nine months of 1935, 3,200 metric tons of palm oil and 8,000 metric tons of kernels. In the Cameroons palm products continue to be obtained principally from wild palms; administrative assistance in production has been concentrated on the provision, also through the medium of the local *sociétés*, of mechanical crushers and presses. In 1936 exports were 44,302 metric tons of palm nuts and 10,263 metric tons of oil.

In parts of the Belgian Congo the oil palm has always been important in native economy as a source of food and other products, and large areas have at different times been planted and then abandoned. It is now held that it is necessary to produce a better quality product than is obtainable by native methods, and since 1935 a campaign of agricultural instruction, accompanied by the distribution of selected seed, has been directed to this end. In 1935 and 1936, 5,292 hectares were planted under this scheme, but it has met with difficulties arising from the failure of the native cultivators to appreciate the need for new methods.

(n) *Coco-nuts and Copra*²

The coco-nut palm has a wide distribution throughout Africa, and in many territories the coco-nut is an important food crop. The coco-nut palm thrives best near the sea, but will grow well inland at elevations up to about 1,500 feet. It is subject to a number of pests such as scale and coco-nut beetle, which may at times assume serious proportions, and there appears to be no cure for the disease of bud-rot which kills the palm. Coco-nut palms in Africa are cultivated only when grown in plantations, and even then the cultivation consists mainly of keeping down grass and undergrowth. In Tanganyika coco-nut growing is confined to the

¹ See Chap. XXI, pp. 1477 ff.

² See Empire Marketing Board, *Survey of Oil Seeds and Vegetable Oils*, vol. ii, 'Coco-nut Palm Products', 1932.

coastal belt, where Europeans, Indians, Arabs, and natives participate in the industry. There is a considerable consumption of coco-nuts for food, and copra is used by local soap factories; also whole nuts are exported to Mombasa and Zanzibar. The amount of copra exported in 1936 was 7,458 tons: it is classed as 'fair merchantable' on the European market. Efforts are being made to improve the product by the introduction of simple drying-kilns. In the Gold Coast the copra industry is making progress in the coastal area, production having reached 2,000 tons per annum. The use of drying-kilns is essential in this area of heavy rainfall and high atmospheric humidity; and the Department of Agriculture is rendering technical assistance to stimulate the industry. French West Africa has an average production of 1,000 metric tons of copra from a planted area of 100 square kilometres. The export in 1935 was 332 metric tons. In French Togoland coco-nut coastal plantations extend between the sea and the lagoons, and the cultivation of the palm is stimulated by the administration. Between 1933 and 1936, 575,000 palms were planted, and exports of copra in 1936 reached 5,656 metric tons.

(o) *Tobacco*

Tobacco has a wide range of cultivation, from temperate to tropical climates, but successful production is restricted by a peculiar sensitiveness to soil and climate, which is so far imperfectly understood; if certain natural conditions are not present during cultivation, the particular quality desired cannot be attained.

Coarse native tobacco is grown on the outskirts of most villages throughout Africa. The leaves are dried and rolled into balls, or ground into snuff. In some districts, such as in the mining areas of the Congo and Northern Rhodesia, there is considerable traffic in the product.

The cultivation and preparation of tobacco suitable for the home market is a highly specialized business and the progress made by native producers is remarkable. In Nyasaland, tobacco, first planted in 1889 and exported in 1893, is grown by Europeans and natives in a proportion which may be taken as about one to five. The production for 1936 amounted to 16,484,160 lb. and

the export was 13,391,541 lb. The native product is fire-cured and that of the Europeans is mostly flue-cured. The market was originally the Union of South Africa, but tariffs enforced a change of market to the United Kingdom, and in 1936 only 199,649 lb. were exported elsewhere. The Imperial Tobacco Company, which established a factory at Limbe in 1908, buys the greater part of the crop. It is estimated that there are about 33,000 acres under native cultivation; the number of registered native growers in 1936 was 53,596. The growth of small crops of tobacco is easily combined with work in food gardens, and this no doubt accounts for the rapid increase in native production since it began about the year 1924. In Tanganyika fire-cured tobacco is produced by native growers in Songea. Total production, including that on European estates, increased between 1931 and 1935 from 19,360 lb. to 437,000 lb. The Department of Agriculture has established demonstration farms and nurseries for rearing seedlings for distribution and assists in marketing the crop, and growers are encouraged to form their own nurseries and rear their own seedlings from seed supplied by the department. A co-operative marketing society was registered in 1936. The tobacco, which is Virginian, approximates to the Nyasaland product, and buying grades have been fixed to maintain the quality.

In Uganda it was not until 1925 that serious consideration was given to tobacco as an export crop, and in 1927, 1,631 lb. was produced from the Bunyoro area where in 1934 production reached very nearly 1,500,000 lb. Production in the West Nile area was started in 1931 and in 1934 amounted to 159,830 lb. The effect of production and local manufacture has been to reduce imports of manufactured tobacco from 606,182 lb. in 1928 to 298,037 lb. in 1935. There is now a considerable export of unmanufactured tobacco to Europe, amounting to 228,783 lb. in 1936, and a market for locally manufactured cigarettes and tobacco in Kenya and Tanganyika. Production is almost entirely in the hands of natives and is supervised throughout. Seed is issued from the Tobacco Experiment Station at Bulindi and seedlings are reared at central nurseries under the supervision of agricultural instructors. There is a government reconditioning and packing plant at Masindi and

tobacco factories at Jinja and Kampala. A Tobacco Advisory Committee appointed in 1936 to review the position of the industry advised modifications in marketing to suit the needs of local manufacturers and of exporters of leaf. The varieties cultivated are Blue Pryor and Western for fire-curing, and Amorella for air-curing, and the yield is estimated at 100 to 500 lb. per acre. In West Africa, as in most other territories, coarse tobacco is grown for local use, and in the Gold Coast the natives are assisted in producing black leaf tobacco to meet a local demand. In Nigeria a tobacco company in the Ilorin Province, the main producing area, buys native tobacco.

(p) Fruits

In Tanganyika the possibility of developing a citrus industry is under investigation and trial shipments have been made to London and India. In Kenya a monopoly for the export of cashew nuts has been granted in order to try to establish the trade in this product as a minor industry. Exports are mostly to America, but there is said to be a good market in South Africa.

In Nigeria citrus is grown by natives in the area just south of the Niger and the first small consignment of oranges was made in 1932-3; during the 1935-6 season, from September to January, 1,709 cases were sent to England. The green Nigerian orange can only command a market in England when supplies from elsewhere are scarce; the costs of production are low, but are counterbalanced by freight and sale charges. A wide range of varieties has been introduced from several countries in the hope that one suited to local conditions and producing a superior quality of fruit may be found. It is considered that there are prospects for the development of a native grapefruit industry; a standard type is to be approved for planting and budded planting material will be distributed to approved farmers. Consideration has also been given to the export of fresh pineapples.

From the Gold Coast some shipments of oranges have been made by private individuals, but it is held that further selection of suitable varieties is necessary. A recent development has been the establishment of the lime-juice industry at Abakrampa, where a factory is attempting to deal with the produce of about 2,000

acres yielding at the rate of about 8 tons of fruit per acre when in full bearing. The principal product is raw lime juice, of which 355,826 gallons were exported during the 1935-6 season; 6,800 lb. of hand-pressed lime oil and 45 tons of fresh fruit were also exported. The supply of fruit is now equal to demand, and it is held that restriction in further planting is necessary.

III. AGRICULTURAL PRODUCTION BY EUROPEANS

While, as we have seen, native agricultural production is that of small peasant farmers who are, in most cases, primarily engaged in growing sufficient food to feed themselves and who, even where a purely cash crop is grown, mix its cultivation with that of food crops, European agriculture is developed either by individual employers of native labour or by companies or individuals buying produce from small native growers. The chief characteristic of the European agricultural enterprise is indeed its dependence on an easy supply of cheap native labour rather than on machinery. The policies of the various governments with regard to the settlement of non-natives and the extent to which land has been alienated to them are discussed elsewhere,¹ as also are the problems arising from the systems of European agriculture² and the extent to which it is subsidized from public funds. The purpose of the following pages is to give a description of the extent of European activity and some account of the main crops grown.

In the Union of South Africa about 173,000 Europeans are actively engaged in commercial agriculture, which is almost entirely in European hands. Only 5 per cent. of the total land area is cultivated and only 15 per cent. can be classed as arable land capable of being cultivated. Most of the remainder is suitable for pasturage of some kind. The main products are maize, wheat, fruit, sugar, and tobacco. In South-West Africa agriculture is of minor importance compared with stock-farming. In Swaziland a large proportion of the land is under European ownership, and is utilized for stock-raising, supplemented by tobacco, cotton, and maize. Lack of capital hinders the development of European agriculture.

¹ See Chap. XII, *passim*.

² See Chap. XX, pp. 1361 ff., and S. H. Frankel, *Capital Investment in Africa*, 1938, chap. iv.

In Southern Rhodesia there has been a reduction from 4,541 in 1931 to 4,305 in 1935 in the number of Europeans actively engaged in farming; the main crops are maize, tobacco, cotton, and groundnuts.

Northern Rhodesia has a small number of settlers engaged in the production of maize, tobacco, coffee, and wheat.¹ In Nyasaland European agriculture is giving way to native production. In Tanganyika the plantation crops are sisal, coffee, maize, and tobacco. In Kenya European exceed native exports, the principal products being coffee, sisal, tea, and maize, with smaller quantities of sugar, wheat, potatoes, beans, pyrethrum, and essential oils. The pyrethrum crop is grown at altitudes of 7,000 feet and over, and in 1936 the exports amounted to 20,798 cwt. Grants to enable investigation to be carried out in connexion with this crop and with the essential oil industry have been made from the Colonial Development Fund. The export of essential oils amounted in 1936 to 2,640 gallons.

In Uganda some coffee, one sisal estate, and all tea and rubber planting are in European hands; the acreage of rubber estates is estimated at 11,545. Exports of rubber ceased in 1932 owing to the fall in price, but amounted to 1,157,500 lb. in 1936. Nigeria has three large European-owned rubber plantations, and there are several in the British Cameroons, in addition to plantations of cacao, oil palms, and bananas. In the Gold Coast there is one rubber plantation. In 1936 the exports of rubber, mostly *hevea* with a small quantity of West African *funtumia*, from Nigeria and the Cameroons amounted to 4,345 tons, and from the Gold Coast to 527 tons. In Sierra Leone a company has taken over a palm plantation originally established by government. In French West Africa there are large banana plantations and smaller areas cultivated by non-natives with coffee, sisal, kola, and rice, mainly in the Ivory Coast and Dahomey. In French Equatorial Africa the *Compagnie Forestière Sangha Oubanghi* held until 1937 a large concession for the export of wild rubber for the Ubanghi-Shari region, but there are no other European plantations. In the French Cameroons there were three rubber plantations in 1937, and cacao is grown by ten companies. In the Belgian Congo the

¹ See below, pp. 920 ff., for further details of these and other important crops.

Huileries Company has a large palm concession in which they are developing plantations.¹ The company obtains raw material partly from wild fruit collected by natives and partly from plantations. The total export of palm products from the territory in 1936 was 92,373 metric tons of nuts and 59,960 metric tons of oil. Rubber plantations are 5,706 hectares in extent, and exports in 1936 were 791 metric tons. It is expected that there will be considerable development in the growing of *hevea*. Bananas and other fruits, coffee, rubber, cinchona, and tea are also produced in the Belgian Congo by Europeans.

(a) *Maize*

In the Union the total acreage under maize is estimated at 9,250,000 acres, of which fully 6,000,000 are European-owned, and production in 1936 amounted to over 18,000,000 bags of 200 lb. each. Production increased considerably after the Boer War, when the depleted animal population caused the farmer to turn to grain production. Periods of high prices stimulated production, but with the drop in prices after 1930 the growing of maize for export has had to be subsidized in order to be profitable. A series of mealie control acts from 1931-5 provided for a control board and for the compulsory exportation of a quota of maize; and resulted in raising the price obtained for maize consumed in the Union above that for grain for export. This policy also increases the cost of feeding cattle, and the Department of Agriculture urges the combination of stock farming with maize growing. An alcohol factory, established at Germiston, will absorb a small proportion of the crop.

In Southern Rhodesia yields are about twice as high as in the Union, but owing to the fall in prices the area under maize has declined in recent years, and is now about 200,000 acres. There are about 2,000 growers. The Maize Control Board created in 1931 pools maize collected from various co-operative organizations, which in 1936 surrendered 653,481 bags to the Board, or 64.7 per cent. of the export pool, of which 249,294 bags were shipped overseas, 103,811 bags were sold to farmer consumers at reduced rates, 43,734 bags were sold at a rebated price to feeders

¹ See Chap. XII, p. 793.

of cattle for the chilled meat trade, and 28,000 bags were exported to adjacent territories. Cultural methods of control of striga (witch weed) are employed and trap crops planted; one of the most effective is Rhodesian Sudan, an indigenous perennial grass, while Amber Cane and White Kaffir corn serve as traps and green manures. A new disease-resistant strain of maize has been bred at the Hillside Station.

In Northern Rhodesia total exports of maize for 1936 amounted to 424,000 bags; of this 274,000 were produced by Europeans.¹ An export quota system is in force here also. In Tanganyika there are some European maize plantations on the slopes of Mount Kilimanjaro, and European maize production in 1936 was estimated at 400 tons.

(b) *Wheat*

The date of the introduction of wheat to the Union is that of the first colonization—1652. A protective tariff on imported wheat was imposed in 1930, and in 1931-2 production equalled local consumption. In 1935 production and consumption were estimated at 6,059,000 bags and 5,000,000 bags respectively and the export price is now below the local value. The Wheat Industry Control Act of 1935 set up a control board and provided for the storage of wheat during years of surplus production and the payment of compensation to holders for losses due to depreciation or decline in prices. Funds for this purpose are derived from a levy on milled wheat.

In Southern Rhodesia production rose from 5,000 bags in 1928 to 63,000 in 1936, but still does not meet local requirements. In Northern Rhodesia wheat is grown almost entirely under irrigation; the crop was 18,000 bags (of 200 lb.) in 1935 and 11,121 bags in 1936, a bad year for rust; in 1937 this figure was further reduced to 5,504 bags, owing to water-shortage. The surplus is exported to Southern Rhodesia.

Elsewhere the cultivation of wheat is restricted by climatic conditions. There is no wheat grown in West Africa, and in East Africa production is confined to the highlands. The area under wheat in Kenya, 48,054 acres in 1935-6, is situated mostly at alti-

¹ See Chap. XX, p. 1387.

tudes of 7,000 to 9,000 feet, but suitable varieties can be grown at considerably lower levels. The total sold in the 1935-6 season was 151,305 bags, and exports in 1936 were 45,996 cwt. of wheat and 61,875 cwt. of wheat flour. The types of wheat at present grown in Kenya have been evolved by the Agricultural Department. Damage by rust reduces both the yield and quality of the crop and research is directed towards breeding rust-resisting varieties, but it is said to be difficult to find a strain that will be resistant to all four forms of rust and yet up to the present standard in quality. Moreover, different altitudes require different varieties.

(c) *Cotton*

Cotton growing has been tried by European farmers in South Africa for many years, but production remains on a comparatively small scale; in 1910-11 it was about 30 bales of 400 lb. each; in 1929-30 it reached 15,000 bales, but fell to 2,500 bales in 1934-5.

The crop is subsidized and an export levy finances the Central Co-operative Cotton Exchange, Ltd., of Durban, which handles about 30 per cent. of the crop.

In Southern Rhodesia cotton growing, stimulated by high prices, received an impetus in 1924-5, and production rose to over 5,000 bales in 1925-6, but after the serious fall in price in 1925 and 1926 most farmers discontinued growing. Production is now on a very small scale; only 2,004 acres were planted in 1936, yielding 329 bales (400 lb.) of lint. A Cotton Research and Industry Board was appointed in 1936 to liquidate and take over the three co-operative ginneries and operate them as required, to foster cotton growing as a European and as a native industry, and to market European cotton and purchase and market native-grown cotton. Bollworms, stainers, and jassids are the principal pests.

In Northern Rhodesia an attempt is being made to establish cotton, and 205 Europeans in the Southern Province have undertaken trials. Ultimate success is still doubtful, but there are prospects of establishing a small industry in areas near the railway line where soils are suitable.

In Nyasaland cotton, introduced as a plantation crop in 1900,

has now become almost entirely a native crop, only 1,997 acres being under cultivation by Europeans in 1936.

In Tanganyika about 10 per cent. (6,200 bales in 1936) of the total cotton export is produced by non-natives, mostly in the Eastern and Tanga Provinces.

(d) *Coffee*

In Northern Rhodesia planters in the Abercorn District have 416 acres under coffee, mostly the Blue Mountain variety. This is a young industry which in 1935 produced 627 cwt. and exported 474 cwt. A co-operative society has recently been formed to deal with the marketing of the entire crop and a small and promising factory has been established at Abercorn.

Coffee planting in Nyasaland dates from 1878; by 1891 there was a flourishing industry in the Mlanje District, and in 1900 the peak was reached with 17,000 acres under cultivation and an export of 2,000,000 lb. Since then the industry has declined, and in 1936 there were only 837 acres under European cultivation.

Coffee was first grown by Europeans in Kenya about thirty years ago; it is now cultivated in suitable areas throughout the highlands. Between 1909 and 1919 exports rose from 169 cwt. to 71,545 cwt.; between 1932 and 1936 the average export was nearly 300,000 cwt.; in 1936 there were 978 registered coffee estates and a total area under coffee of 101,234 acres. *Arabica* and *robusta* varieties are used according to soil and climatic conditions. The mealy bug and berry disease have been specially studied by the Department of Agriculture, and the need to maintain quality in the face of competition calls for the fullest investigation.¹ The commercial side of the industry is controlled by the Kenya Coffee Board, coffee curing and cleaning factories have been established at Nairobi, Kitale, and Mombasa, and recently sales by public auction in Nairobi have become a regular feature of the trade, so that now coffee can be shipped direct to overseas buyers. In Uganda, where coffee growing is mostly in the hands of Africans,² European plantations accounted for 6,028 acres of *arabica* and 6,663 acres of *robusta*, and Indian for 158 acres of *arabica* and 623

¹ See below, pp. 943 ff.

² See above, p. 910.

of *robusta*. French Guinea has a small non-native production of coffee. In French Equatorial Africa coffee plantations have been established along the Sangha and Ubangi rivers; exports were expected to exceed 1,200 metric tons in 1936. In the French Cameroons fifteen companies had coffee plantations in 1937. In the Belgian Congo, 56,258 hectares were planted with coffee by Europeans in 1936, and production was 15,080 metric tons of *robusta*, and 2,995 metric tons of *arabica*.

(e) *Tea*

In Nyasaland first attempts to introduce tea about 1878 were not successful, but ten years later the crop was established. Production was not appreciable until the beginning of the present century, but progress has been steady; thus in 1911-12 the acreage under cultivation was 2,593 and the exports 43,876 lb.; in 1936 the figures were 16,346 acres and 7,706,088 lb. respectively. Production is confined to the two districts of Mlanje and Cholo, where rainfall is above the country's average, and under an international restriction scheme the acreage is limited to 17,700 acres up to March 1938. There is a cess on exported tea, the proceeds of which are used by the Nyasaland Tea Association for the benefit of the industry.

In Tanganyika a tea industry is being developed with prospects of success¹ in the Usambaras and Southern Highlands, and in 1936 production amounted to about 106,000 lb. Four tea factories have been established and a growers' association formed. As in Nyasaland, expansion is controlled by the international scheme. In Kenya the production of tea has risen rapidly in the past few years, from 930,209 lb. in 1930-1 to 9,043,124 lb. in 1936-7. The international scheme restricts the area under cultivation and expansion is also limited by climatic conditions. In Uganda tea estates occupied 2,139 acres in 1936 and produced 180,000 lb. for local consumption and 84,432 lb. for export.

One tea plantation exists in the French Cameroons, and in 1936 a company was formed to open a tea plantation near Lake Kivu in the Belgian Congo.

¹ H. H. Mann, *Report on Tea Cultivation in the Tanganyika Territory and its Development*, 1933.

(f) Tobacco

Tobacco growing in South Africa dates back to the early colonial days. The original product was the well-known Boer tobacco prepared by fermenting, rolling, and coiling the leaf. Most of the crop is now sold to manufacturers for the production of cigarettes and pipe tobacco for consumption in the Union, and until quite recently the greater portion of the crop was air-cured. Flue-curing was not taken up to any extent till 1930. Production has varied; the maximum was 23,000,000 lb. in 1928, and it is now about 16,000,000 lb. Irrigation is commonly used and the principal area of production is the western Transvaal. The government encourages co-operation in the marketing of tobacco and protects the industry by an import duty on unmanufactured tobacco from territories other than the Rhodesias. There is also an export bounty at rates varying according to grade.

Swaziland in 1936 exported 282,735 lb. of tobacco through a co-operative society with 300 European members.

In Southern Rhodesia the tobacco industry, which was started by the pioneer settlers in 1895 and is still in the hands of European planters, yields some £600,000 a year. In 1927 the acreage was 30,164 and production 19,000,000 lb.; in 1936, 41,497 acres produced 22,401,707 lb., of which 21,717,898 were Virginia type and 683,809 Turkish type. Exports of unmanufactured tobacco in 1936 amounted to 18,367,920 lb., of which 13,500,000 lb. went to the United Kingdom, 2,000,000 to the Union, and 2,500,000 to other countries. About 95 per cent. of the tobacco is flue-cured and is classed as the best quality African tobacco.

In Northern Rhodesia, where production is also in non-native hands, Virginia tobacco occupies over 3,400 acres, mostly in the Fort Jameson area. Exports for 1936 were absorbed by the United Kingdom—581,000 lb., the Union of South Africa—350,000 lb., and Southern Rhodesia—155,000 lb. A Tobacco Board safeguards the interests of the industry and the Northern Rhodesia Tobacco Co-operative Society¹ has been organized to facilitate marketing. In Nyasaland tobacco growing is now largely in the hands of natives;² the European area under cultivation

¹ See Chap. XXI, p. 1469.

² See above, p. 915.

in 1936 was 7,349 acres. In Tanganyika the output of the European estates in Iringa for 1935 was 152,000 lb. of Virginian and 4,000 lb. of Turkish tobacco, the bulk of which is sold to Dar-es-Salaam manufacturers.

(g) *Sisal*

The cultivation of sisal as an economic crop is confined to East Africa; it grows satisfactorily at a low altitude in moist conditions and thrives on the sandy soils of coastal areas. In Tanganyika the estimated area under sisal in 1935 was 276,500 acres, mostly in the coastal belt near Tanga, and the product accounts for half the tonnage of agricultural exports from the territory. Despite low prices export has risen from 60,554 tons of sisal fibre in 1932 to 80,559 tons in 1936, of which some 20,000 tons are produced by Indians. During this period production costs had to be reduced to a minimum, but the sudden rise in price to £28 per ton in 1935-6 gave great assistance to the industry. It is held that the capacity of the industry for expansion is limited only by the supply of available labour, and at present there is said to be some difficulty in obtaining a sufficient supply; the unpleasant nature of this crop makes the need for attractive conditions of labour particularly important. In 1934 a new sisal experimental station was opened at Mlingano to work in conjunction with Amani.

Sisal has been grown in Kenya from its early days, but it was not until 1915 that export reached the moderate level of 1,652 tons. In the twenty years since then there has been a steady and substantial increase, and in 1936 exports reached 34,746 tons. Production is in the hands of European companies operating estates on a large scale with their own decorticating plants. In contrast with the situation in Tanganyika, the greater part of the acreage in Kenya is in the highlands. Investigations on systems of planting and improvement of fibre extraction are carried out on the estates by the owning companies, and the Kenya crop is remarkably free from pests and diseases. In Uganda a sisal estate of 5,000 acres in Bunyoro produced 574 tons in 1935 and 1,457 tons in 1936.

(h) Fruit

In the Union the first fresh fruit was exported in 1888. Oranges were introduced from St. Helena soon after the occupation of the Cape in 1652, but exports were comparatively small until after the War, when the good prices realized for South African fruit gave a decided impetus to the industry. Expansion began in 1918, when a large number of trees were planted, many of which proved worthless, as little care had been exercised in bud selection. The industry receives special concessions in respect of its export trade.

In 1936, 17,450,956 lb. of dried fruit were exported, 155,189 tons of citrus, and 91,158 tons of deciduous fruit.

The production of dried fruit is of long standing in South Africa and after the War there was a rapid expansion. The principal producing area is in the Cape Province.

There is a certain amount of citrus growing inland and north of Capetown, but the principal areas of production are around Port Elizabeth and in north and east Transvaal. In recent years the expansion in grapefruit production has exceeded that in orange production. Citrus growing is carried out on estates of varying size and in all cases irrigation is necessary. After 1920 a considerable number of local citrus fruit marketing associations were organized and in 1926 they united to form the South African Co-operative Citrus Exchange Ltd., which is financed from a levy on the exported fruit. The local associations own most of the co-operative packing houses and, if required to do so, fumigate and pick the fruit for members. The industry requires government assistance, as the prevailing price leaves only a small margin of profit, and in 1936 concessions were granted in the rates for pre-cooling, transport, handling and inspection, and also in railage charges.

South Africa became known as a grape and wine producer two centuries ago, when Capetown was a port of call for ships bound for the Indies, but it was not until refrigeration in ships was improved in the early part of this century that the exportation of deciduous fruit from the Capetown area assumed importance. Rapid expansion began after 1926. The disposal of supplies is becoming difficult in the face of increasing competition on the

British market, and tariff policies in continental countries. The extent of grape production can be gauged from the fact that an export of 34,805 tons in 1935-6 represents only about 10 per cent. of the total production; about 80 per cent. is used for wine and the other 10 per cent. for drying. The principal grape-growing district is near Capetown, where the rainfall is sufficient and irrigation unnecessary. The expansion in vine culture is largely attributed to the enactment of the Wine and Spirit Control Act of 1924, which gave the Co-operative Wine Growers Association (the KWV) of South Africa full control over the disposal of distilling wine.

The principal areas for other deciduous fruits lie inland from Capetown and along the south coast, and there are two important irrigated areas north of Port Elizabeth. The marketing of fruit is organized through local associations which are members of the South African Co-operative Deciduous Exchange Ltd., financed from a levy on exported fruit. It is estimated that there are about 2,000 commercial growers of deciduous fruit in the Union, but only about 750 produce for export, and about 40 per cent. of the export fruit is handled by the Exchange.

The government concessions take the form of substantial rebates of railway rates and of charges for pre-cooling and inspection. In Southern Rhodesia the citrus industry is mostly in the hands of one company and expansion is hampered by low prices. In 1916, 1,336 cases were exported and in 1936, 117,940 cases.

Elsewhere in Africa the fruit trade is unimportant and conditions are not generally favourable to the development of citrus or other fruit industries, except bananas. Bananas are produced on European-owned plantations in the Ivory Coast, and in the French and British Cameroons where the export is mainly from the German-owned plantations; in 1936, 49,605 tons were exported and there is a regular service for this product. In the Belgian Congo, apple, almond, and peach orchards planted in 1934-5 have been successful in the Katanga.

(i) *Sugar*

Sugar production in the Union is confined to a narrow strip along the coast of Natal Province, about 235 miles long and 10 to

15 miles wide. One-third of the crop is produced by milling companies owning large estates and the other two-thirds by about 600 independent planters with estates averaging 300 to 400 acres, although some extend to about 1,600 acres. The industry dates from 1849; after 1880 it expanded on account of the opening of the mines and a further increase took place when the Anglo-Boer War produced an increase in local demand. Government policies and preferences have accounted for subsequent expansion. Production increased from less than 100,000 short tons in 1912 to 417,318 in the 1935-6 season. In spite of increased local consumption, it is still necessary to export over 50 per cent. of the crop at world prices, which is only possible owing to the high internal price maintained through protection.

In Kenya sugar is grown principally by Europeans and to a lesser extent by Indians. Although the quantity produced by the mills is considerable—about 15,000 tons in 1936, of which 6,000 tons were exported—cultivation is of local interest, and in order to ensure the markets of Kenya for the industry it is protected by tariff.

IV. ANIMAL HUSBANDRY

(a) *General*

The geographical distribution of domestic cattle is determined in Africa by the existence of the tsetse fly; as shown below, this means in effect that in the Rhodesias and in East and Central Africa there are large areas in which domestic cattle are maintained only with great difficulty, or not at all, and that in the southern areas of West Africa the only cattle found are the small dwarf shorthorns, which appear able to resist the trypanosome.¹

Purely pastoral nomadic tribes are found principally in the savannah region on the southern border of the Sahara, but a much larger number combine stock-rearing with cultivation. Most tribes also own sheep and goats, the latter in greater numbers than cattle; goats also may play their part in marriage and other social customs: with the Kikuyu, for example, they take the place of cattle in this respect. A small variety of chicken is found in most native villages and they play an important part both as a food and

¹ See below, pp. 932 ff.

in magical rites. The sale of chicken, often carried great distances to markets, is a source of relatively considerable revenue. In Natal and the Ciskei, natives are undertaking poultry breeding, which appears to be a form of industry suited to peasant farmers.

Both in South and East Africa European agriculture in its early stages relied mainly on stock-rearing, which later tended to be abandoned in favour of cultivation. In the Union of South Africa, however, some authorities have expressed the opinion in recent years that the country, with the exception of small areas where special crops such as citrus can be grown with profit, is better suited for animal husbandry. It is held that more than four-fifths of the total area of the territory can be used only for grazing, and that animal husbandry has the further advantage to a country of predominantly poor soil that it can produce the manure necessary for enriching the grass lands, or assisting in mixed farming.¹ The same consideration applies, in an even more marked degree, to the mandated area of South-West Africa. There are throughout East Africa certain areas which, whether viewed as purely native or fitted for European colonization, are primarily suited for stock-raising rather than for agriculture, either because of the character of the climate and soil or on account of difficulties of transport. Unlike other agricultural produce, cattle 'convey themselves to their market'.

The indigenous African cattle appear to be derived from three original stocks. The Hamitic longhorn probably descended from the giant-horned wild ox of the Nile valley (*Bos primigenius*); probably the surviving strain nearest to the original type is the N'Dama cattle, which have been extensively introduced into West Africa. The *Brachyceros* or the shorthorn, possibly derived from the *Bos primigenius* or a small ancestor, came to Africa from Asia at the end of the neolithic era, and general fusion with the Hamitic longhorn resulted. The *Brachyceros* were dwarf cattle, and it is now thought that the dwarf cattle of the regions near the Gulf of Guinea represent, not a distinct breed, but a survival of the older form. The term 'West African shorthorn' does not represent a breed, but is used to describe the unhumped short-horned cattle of West Africa which are a mixture of Hamitic

¹ See H. D. Leppan, *Agricultural Policy in South Africa*, 1931.

longhorn, shorthorn, and zebu. The zebu are, broadly, humped cattle, and came to Africa more recently. They have not the same resistance to trypanosomiasis, but have better resistance to rinderpest.¹ The Afrikaner cattle are the nearest to the pure zebu.

In South Africa a number of British breeds, notably the Ayrshire and Friesian, have been successfully acclimatized, and in all areas of European settlement introduced types have been crossed with indigenous stock. In South Africa good breeds for the beef industry have been developed by crossing with the Afrikaner, and the Sussex type is said to give the best results. In Southern Rhodesia the three local types of native cattle have been crossed chiefly with Herefords and Aberdeen Angus, Devons and Shorthorns being also used. In Tanganyika, Friesian and Ayrshire cattle have been imported with a view to the production of a dairy type. In Kenya there are a number of high-grade herds of British dairy cattle established in the highlands. In French West Africa three European herds, the Charollaise, Normande, and Tarentaise, have been introduced with varying degrees of success. In the Belgian Congo shorthorn bulls have been crossed with the native type in the Uélé region. In the Lower Congo a breed imported from Angola has been crossed with Hereford, Devon, Ayrshire, Friesian, Breton, and Afrikaner types.²

Native sheep are of many types; the majority are hairy and fat-tailed. Merino sheep were established in the Cape Colony in 1812, and the number in South Africa is now second only to that of Australia. Blackhead Persians, which can thrive on land too poor for merinos, were introduced later. Mutton-breed rams such as Dorset horn, Southdown, Leicester, and Romney Marsh have recently been imported for crossing with local varieties. The native sheep industry of Basutoland is based on the merino; Karakal and Blackhead Persian have been introduced in South-West Africa, from which there is a large export of pelts. There are some merino herds in the drier parts of Kenya, such as Naivasha; in the wetter areas Romney Marsh are crossed with native sheep. Attempts to introduce merinos in Northern

¹ S. L. Stewart, *The Cattle of the Gold Coast*, 1937, and E. B. Worthington, op. cit., chap. xiv.

² See E. B. Worthington, op. cit., chap. xiv.

Nigeria were unsuccessful. Both the French and Belgian Governments have imported sheep. In French West Africa the Diré Company has a flock of some 2,000 merinos. In the Belgian Congo large flocks of merinos and Romney Marsh are naturalized at the government farm at Nioka in Ituri. Improvement work has been concentrated on the pastoral areas in the north-east and south-east. In Angola, Portuguese and French merinos and Rambouillet have been imported for breeding wool sheep, and Persian Blackheads from South Africa for mutton.

African goats are remarkable for their resistance to trypanosomiasis, their apparent immunity to tuberculosis, and their ability to obtain food in difficult conditions. Angora goats have been introduced in the Union of South Africa and Basutoland.

Native stock-rearing is characterized by the importance attached to numbers rather than quality, the Fulani being the only tribe who follow any principles in breeding. Cattle are grazed at will on the fallow land, individual rights to grazing areas being rarely recognized.¹ The problems of erosion following from tribal systems of grazing are discussed in a later chapter.²

(b) Animal Diseases and Preventive Measures³

The prevalence of animal diseases is a serious obstacle to the development of animal industry in Africa, particularly in view of the restriction of markets imposed by quarantine regulations. Of these trypanosomiasis, spread by the various species of tsetse-fly, is prevalent in an area bounded roughly on the north by a line from the mouth of the Senegal river through Lakes Chad and Rudolf to the coast of Italian Somaliland, and on the south by one which bisects Angola and then runs southward along the boundary between that territory and Northern Rhodesia and then eastwards across Southern Rhodesia and Portuguese East Africa. It is estimated that 65 to 75 per cent. of this area is infested by fly. In Bechuanaland fly encroachment is driving cattle from well-watered to drier areas. In Southern Rhodesia fly is encroaching on areas which were freed from it by the destruction of game in the rinderpest epidemic of 1896, at a rate which some years ago was

¹ See Chap. XII, pp. 829 ff.

² See Chap. XVI, pp. 1066 ff.

³ For a fuller account see E. B. Worthington, *op. cit.*, chapters x and xiv, and map.

estimated at 1,000 square miles a year. Since 1918, when European farming areas were first invaded by it, a number of farms have been abandoned and more are threatened, and it is held by some authorities that further encroachments can only be prevented by the destruction of the game on which the fly feeds. At present organized destruction of game is carried out between the fly-free and the infected areas, and over 2,000 square miles have been cleared, but the method has met with criticism on the ground that the fly may also feed on the numerous small mammals which have not been destroyed.¹ In Bechuanaland similar methods are considered impossible owing to the great area involved and the sparse population. Trapping of flies has been carried out in Tanganyika, Zululand, and parts of the Congo, but its chief value appears to be that of helping to clear up isolated patches of fly which have been attacked by more wholesale methods.²

The treatment of animals infected with trypanosomiasis with the compound 'Surfen C' synthesized in the Bayer laboratories has given good results. No certain method of immunization has yet been found, but a process is under trial by Dr. Claus Schilling, Director of the Robert Koch Institute in Berlin, who has carried out experiments at the government farm at Mpwapwa in Tanganyika. In Northern Rhodesia importance is attached to the development of resistance by satisfactory feeding. In West Africa it has been found that there are many local strains of trypanosome, immunity to one of which does not confer immunity to others, but the N'Dama appear most resistant to the different strains.

The question of importing cattle for breeding purposes is bound up with that of resistance to disease; imported cattle are more susceptible and the pasture is not generally of a quality to build up such resistance. For native stock, the better line at present would appear to be the improvement of indigenous breeds, to develop a useful dual-purpose animal needed for mixed farming.

Rinderpest entered Africa by way of the Nile towards the end of the last century. In 1896 an epidemic devastated the

¹ See R. W. Jack, *The Tsetse Fly Problem in Southern Rhodesia*, 1933, and 'Report of the Chief Entomologist for 1934', *Rhodesian Agricultural Journal*, Bulletin 962, 1935.

² For measures taken with regard to human trypanosomiasis (sleeping sickness), see Chap. XVII, pp. 1129-36.

cattle areas of eastern and southern Africa, and the disease is now found also in West Africa. Methods of immunization were first discovered in South Africa, and the disease is now under complete control in South Africa and the Rhodesias. The method most commonly adopted is simultaneous inoculation with virulent blood and anti-serum. Inoculation of herds is apt to be followed by a certain mortality from other diseases contracted during the period of lowered resistance, but this has been reduced in West Africa to 2.5 per cent. of inoculated animals and in Kenya to 1.5 per cent., and it is now the aim in most territories to immunize young animals while still healthy. In Northern Nigeria both Fulani and Hausa readily bring their herds to immunization camps and seem to appreciate that the initial losses are offset by the lifelong immunity to rinderpest of the majority of the herds. In the Gambia annual inoculation campaigns are carried out by veterinary officers seconded from Nigeria or the Gold Coast. In Kenya a method of vaccination with extracts of organs of diseased cattle (spleen vaccine), first used by Boynton in the Philippines in 1917, has been under trial since 1927. The vaccine prepared in this way remains potent for a long period and so can be used at a distance from the laboratory by stock owners on their farms and applied over large areas more rapidly than double inoculation.¹ It usually produces no reaction but it does not confer permanent immunity, and production is at present expensive. A cheaper type of vaccine is under trial at the research station at Marua in the French Cameroons. In Nigeria inactivated vaccine is used for the immunization of cattle entering this territory from the adjoining French colonies; the movement of such cattle is controlled by orders of the native administrations of the northern territories prohibiting their entry except at specified points. Spleen vaccine can also be used in emergencies to control outbreaks of rinderpest, and as a preliminary to double inoculation in the case of herds which are heavily infected with trypanosomiasis.

East Coast fever is found in all regions between Natal and the southern part of Italian Somaliland, and extends westward into the Belgian Congo; it is not found in West Africa. The discovery that the fever is a parasitic disease carried by ticks was made by

¹ J. Walker, 'Rinderpest Research in Kenya', *Agricultural Department Bulletin*, 8A, 1929.

Sir Arnold Theiler in 1904 at the Onderstepoort veterinary laboratory in South Africa.¹ No satisfactory method of immunization has been found, and the usual method of control is the dipping of stock at frequent intervals in order to remove the ticks. This is now a routine operation in large parts of East Africa, and is readily practised by natives. But in order to be fully effective this must be accompanied by fencing or other measures for the control of movements of stock.

Contagious pleuropneumonia is controlled by vaccination both in East and West Africa and in Kenya, where much work has been done on diagnosis and on the preparation of vaccines, and it has been eradicated from most European herds. In Northern Rhodesia it is enzootic in the Barotse Province, to which it is confined by means of a police cordon 146 miles long, and on the Angola border a buffer area established in 1934 is patrolled in order to prevent the infiltration of infected cattle. In 1936 an intensive vaccination campaign was undertaken from a field station established for the purpose in Sesheke District. In Tanganyika the disease is confined by quarantine measures, affecting some 116,000 cattle, to six areas in the Northern and Tanga Provinces; triple vaccination, the method recommended by the Kabete research laboratory, was tried in 1936, but is only practicable in specially favourable conditions. In Uganda an intensive campaign in 1926 eradicated this disease over a large area, but it is still enzootic in Karamoja, where quarantine measures are enforced. In Kenya control is rendered difficult among native tribes by the fact that natives set a high value on cattle which have recovered from the disease and are not readily persuaded to slaughter infected animals. In the Gold Coast the disease is spread by the smuggling of infected cattle over the French frontier, but it has been found to be controllable by a vaccine which gives immunity for about a year. In Nigeria prophylactic vaccination is unpopular with native owners, and vaccination campaigns can only be carried out when outbreaks occur.

Foot and mouth disease is usually less virulent in Africa than in Europe, but has attained serious proportions in Southern Rhodesia. Anthrax is widespread in native areas in the Union;

¹ See below, p. 946

it is the most important disease in Bechuanaland and is prevalent in Northern Rhodesia in the Zambesi and Kafue valleys; vaccination measures have not been pressed in the Zambesi area owing to the policy of concentrating on the eradication of bovine pleuropneumonia. In Tanganyika the disease occurs sporadically and is rarely reported except when cases of human infection occur. Vaccination, and the burning of carcasses in pits, are carried out as preventive measures. It is also serious in Ankole and the Masaka District of Buganda in Uganda. In Kenya annual vaccination is carried out in the settled areas.

Recent studies in Uganda indicate that bovine tuberculosis is more common than was previously supposed. In Nigeria this disease assumed serious proportions in 1936 and appears to have spread from the Cameroons. The white zebu cattle owned by the Fulani in the Northern Provinces are apparently immune.

Quarantine restrictions on the movement of cattle have had an important influence on the development of animal husbandry. The Cape Colony was closed to imports of cattle early in the present century, owing to an outbreak of East Coast fever in the Rhodesias and the Transvaal, and the Union continued the restriction after 1909. A quarantine market was opened in Johannesburg in 1912. In 1923 the quarantine regulations were relaxed, but were replaced by measures of direct protection, and they were reintroduced between 1932 and 1935 as the result of an outbreak of foot and mouth disease in Southern Rhodesia. The marketing of cattle from various territories in Northern Rhodesia and the Congo has been almost entirely determined by quarantine restrictions. Up to 1914 the requirements of both territories were supplied almost entirely from Barotseland. In 1914 exports from that area were prohibited owing to an outbreak of pleuropneumonia, and their place was taken by cattle from Ngamiland in Bechuanaland. At this time cattle from Southern Rhodesia were excluded from territories to the north on account of East Coast fever, but when the restrictions were withdrawn in 1922 this colony captured the Congo trade. After the outbreak of foot and mouth disease in Southern Rhodesia a fresh embargo was imposed by the Belgian Congo on all imports across its southern

frontier; this remained in force in 1936. An agreement was subsequently made between the Rhodesias and Bechuanaland by which imports of breeding stock were permitted, but slaughter cattle would only be imported under permit in cases of actual necessity; in 1935 the agreement was renewed for an indefinite period. This has had the effect of creating a protective market in the copperbelt for Northern Rhodesian cattle, and also of destroying the market for Bechuanaland cattle, which had been created by the restriction of movement of cattle from Barotseland owing to pleuropneumonia in 1914.

Local quarantine regulations prevent the marketing of native stock and where maintained in force over long periods contribute to overstocking. This has been particularly important in Kenya and in the Union. Where, however, it has been realized that it is imperative to encourage the disposal of surplus stock, measures such as the establishment of controlled routes for the movement of stock have been introduced as an alternative to the complete prohibition of such movements.

(c) Slaughter Cattle and the Meat Industry

With Africans the sale of cattle is either of secondary importance, or in some cases is rendered difficult by restrictions imposed through force of circumstances; again the breeding of cattle for meat is imperfectly understood, and the breeding of cattle for meat and the market is at present largely confined to the European community in South and East Africa. In the Union it is estimated that 600,000 cattle are slaughtered every year, of which some 90,000 are imported from neighbouring territories. Since 1924 restrictions requiring imported cattle to be over a fixed minimum weight have been imposed, and a subsidy scheme was inaugurated in 1932 in order to stimulate the export of chilled beef. It is said that grass-fed South African cattle are better suited to the chilling process than those from the alfalfa regions of the Argentine. The trade is further encouraged by bounties. In 1936 the total quantity of meat exported was 22,683,372 lb. Auction sales for native stock have been organized by the Veterinary Department in Natal and Zululand, and have begun to show some success in altering the attitude of natives towards their

cattle; some 10,000 cattle were sold in 1935-6.¹ South-West Africa exports considerable quantities of frozen beef from the Imperial Cold Storage Company's depot at Walvis Bay; the quality of stock is not suitable for chilling and freight charges are too high for the export of live cattle to be practicable.

Exports of slaughter stock from Bechuanaland have been severely restricted by quarantine regulations in neighbouring territories, and by the closing down of the Angola diamond mines, which up to 1925 provided a market for this territory. A cold-storage market opened in Durban in 1926 allowed a quota of 10,000 cattle to the protectorate, but prices were so low that the administration had to resort to export bounties in order to compete with Union cattle. The development of a chilled beef export depends on the possibility of organizing it in the months when supplies are relatively short in the United Kingdom market. The establishment of a canning and meat-extract factory has also been recommended.²

In Southern Rhodesia the local market is the principal outlet for cattle and absorbs about 80,000 head annually. The shipment of live cattle to England was attempted in 1926, but high freight charges made this unprofitable. In 1936, however, 1,660 cattle were exported to the Union. The chilled beef trade is now being developed through the agency of the Rhodesian Export and Cold Storage Company; and Messrs. Liebig's meat-products factory at West Nicholson absorbed 37,237 cattle in 1936. It must be realized that, though the existence of a factory is valuable, it gives an opening mainly for low-grade, not for quality cattle. In Northern Rhodesia cattle are slaughtered entirely for the local market, which, as has been mentioned, is protected by quarantine regulations.³ About 11,000 cattle were sold for slaughter by natives in 1936. The total absorbed by the market was between 16,000 and 17,000. It is predominantly a low-quality market.

Nyasaland has found an export market for cattle in the Lupa goldfields, to which 1,200 head were exported from North Nyasa in 1936. In that year the number of cattle slaughtered, about

¹ For native markets, see Chap. XX, p. 1421.

² *Report*, op. cit., Cmd. 4368, 1933, pp. 129-30.

³ See *Laws*, vol. iii, cap. 87, 1934.

2,000, represented a great increase on any previous year. In Tanganyika and Uganda the sale of cattle is increasing; local markets absorb practically all the animals sold. Here again there is a market only for low-quality cattle. In Kenya the organization of a meat-products factory as an outlet for surplus stock has repeatedly been urged,¹ and in 1937 one was opened by Messrs. Liebig in the Masai Reserve. Up to the year 1936, not more than 30,000 cattle and 66,000 sheep and goats were slaughtered annually. In 1936 Kenya and Uganda together exported 7,393 cattle and 8,897 sheep and goats.

In Nigeria meat is a regular article of native diet; in 1936 an ascertained total of 426,818 cattle were slaughtered during the year, and the actual total is believed to be much higher. Not all of these, however, were bred in the territory, as some 123,000 cattle entered from neighbouring French colonies during the year. In the Gold Coast, where there is also a large native consumption, an important problem is the prevention of the slaughter of immature animals. In both cases demand is only for the type required in a native market.

Pig products are of importance in a few territories only. Experimental shipments of frozen pork have been made from Southern Rhodesia, and in Kenya there is a bacon and ham factory which supplies local needs and in 1936 exported 1,168 cwt.

(d) *Hides and Skins*

In the Union of South Africa exports of hides and skins produced by European farmers are subsidized by government and were valued at £1,882,485 for 1936, over half being sheep skins; only wool and fruit exports exceeded this amount in value. From South-West Africa karakal pelts have been exported to the number of 814,561 in 1936. Hides and skins exported from Basutoland were valued at £2,526 in 1936, and from Bechuanaland at £23,777. In Bechuanaland native hides and skins were reported in 1933 to have become practically unsaleable owing to the unsatisfactory methods of preparation used and the difficulty of teaching new methods;² the preparation of karosses

¹ See, for example, *Report of the Agricultural Commission*, 1929, p. 30.

² *Report*, op. cit., Cmd. 4368, 1933, pp. 28-9.

has, however, been much improved in recent years as the result of official propaganda. Southern Rhodesia in 1937 exported over five million lb. of cattle hides. The hide industry is encouraged among natives by propaganda in methods of preparation. Small exports of ox hides, sheep and goat skins are made from Northern Rhodesia, and trade in hides from Nyasaland began in 1936 with an export of about 500 to Tanganyika.

In Tanganyika 3,094 tons of hides and skins mainly produced by natives were exported in 1936. The value of well-prepared hides is said to have been raised about 10 per cent. by propaganda on flaying and shade-drying; efforts are being made to develop the industry of sheep and goat skins by means of similar improvements in preparation. In Kenya the export in 1936 of 32,462 cwt. of hides represents a decrease on previous years owing to the reduced mortality from drought conditions in the native areas. Shade-drying has been actively encouraged by the provision of sheds for the purpose at all centres where cattle are slaughtered in considerable numbers, and rules making shade-drying compulsory have been imposed in some districts with the co-operation of the local native councils. Shade-drying, although difficult to supervise, is being adopted also for goat skins. In Uganda 20,943 cwt. of hides, of which 1,918 cwt. were shade-dried, were exported in 1936.

In Northern Nigeria a systematic campaign for the improvement of hides and skins has been undertaken through public instruction in flaying, which is given in over a thousand native authority markets. The most valuable skin produced in Nigeria is that of the red Sokoto goat, and the breeding of herds of pure red goats is being actively encouraged. In the recent period of high prices the slaughter of sheep and goats for their skins was carried to a point where the depletion of the herds was threatened, but a decrease in exports in 1936 is taken as an indication that the danger has been recognized. In this year exports were: cattle hides, 9,833,396 lb.; sheep skins, 1,376,961 lb.; goat skins, 4,585,751 lb. Exports from the Gold Coast were 8,589 cwt. of hides and 4,944 cwt. of skins. Hides and skins are also exported in small quantities from Sierra Leone and the Gambia.

French West Africa in 1936 exported 1,766 metric tons of hides and skins; the French Cameroons exported 508 metric tons of hides and skins. This industry is being developed in Equatorial Africa.

(e) Wool

Merino wool is the principal agricultural export of the Union; in 1936 the amount exported was about 214,000,000 lb. Native wool exported in 1935-6 amounted to about 47,000 lb. Exports of mohair in 1936 were 6,341,602 lb. The export of wool from South-West Africa, where the country is not suitable for merino sheep, is of minor importance. Wool is the most valuable animal product of Basutoland; its intrinsic quality is good, but marketing in poor condition has given it a bad reputation, and measures for grading have now been taken. The export in 1936 was 5,986,871 lb. and exports of mohair in the same year were 817,849 lb. In Southern Rhodesia and in Kenya wool is a product of European farming; the former country in 1936 exported 63,936 lb., principally to South Africa, and Kenya exported 1,458,912 lb. French West Africa exported 205 metric tons of wool in 1936.

Dairying

In most African territories the manufacture of ghee¹ has been the principal dairy industry developed among native stock-owners, but butter and cheese production have attained some importance in areas of European settlement. In the Union, dairying is organized under the Dairy Industry Control Board, which controls the erection of creameries and cheese factories and four condensed-milk factories. In 1936 there were 58 creameries, 109 cheese factories, and 4 condensed-milk factories. Eight native creameries are supervised by the Native Agricultural Department. Total production was 46,565,000 lb. of butter and 11,183,000 lb. of cheese. Exports were 11,186,000 lb. of butter and 2,459,000 lb. of cheese. Export bounties are paid, to which producers contribute by means of a levy. A state-aided scheme for the supply of milk and cheese to schools and of butter to charitable organizations,

¹ Clarified butter.

either free or at reduced prices, was inaugurated in 1935. In South-West Africa efforts are being made to expand the dairy industry by means of three large creameries, which have facilities for the renovation of tainted butter, but exports are at present small.

Cream is produced in the south-western part of Swaziland, which is within easy reach of the creamery at Piet Retief; natives participate in the industry where separators are available, but in the large central area production would not be practicable without the establishment of a local creamery.¹ In Bechuanaland there are now two creameries controlled for purposes of marketing by the Union Dairy Industry Control Board. Cream is produced by hand separator in native areas within thirty miles of the railway line, but the yield is low, and the quality inferior to that produced by Europeans. Butter cannot be profitably produced for export, but cheese is made as a home industry and exported to the mining areas in Northern Rhodesia and the Congo. The development of dairying without careful selection of cows which can give enough milk both for dairying and calf rearing may lead to the deterioration of herds, but in this territory, where various measures restrict the export of cattle, it appears to be an economic necessity.

In Southern Rhodesia eight registered creameries produce over a million pounds of butter annually, of which about a quarter is exported under a bounty system. The principal markets are Northern Rhodesia and the United Kingdom; there is also a large local consumption. Northern Rhodesia produced 206,052 lb. of butter in 1936. A co-operative creamery at Lusaka is supplied by seventy-eight producers. Native participation in the trade is negligible: one mission collects cream from them.

In Tanganyika ghee is prepared under the supervision of the veterinary department at centres in the Central and Western Provinces, which are opened temporarily during the period when there is a milk surplus. This measure is said to stimulate efforts by native herdmen to obtain the maximum quantity of milk. In 1936 there were ten factories in operation in the Central Province and three in the Western Province. In the Musoma area in the

¹ *Report on the Financial and Economic Situation of Swaziland*, Cmd. 3114, 1932, p. 140.

Lake Province the ghee industry is entirely privately managed and produced about 700 tons in 1936. A new method of production in which the cream is boiled direct to ghee without being churned was introduced during the year. Musoma ghee is exported to all parts of Tanganyika, to the neighbouring territories and the Arabian coast, and the limit of production has been reached.

In Kenya butter and cheese are produced in the European areas, and the export of butter in 1936 was 24,984 cwt. Ghee is produced in native reserves and the principal sources are in Central and South Kavirondo; in the purely pastoral areas with their low rainfall there is rarely a milk surplus, but encouragement is given to its production by means of dairy units established at suitable centres during the short periods of abundant rainfall when milk is plentiful. The dairy unit consists of a churn, separator, and accessory equipment, the capital expenditure for which is met by local native councils or occasionally by enterprising individual natives. The number of dairies is limited, and exports cannot be developed till a guarantee of standard quality can be given.

In Nigeria the commercial manufacture of ghee was first encouraged by the veterinary department in 1931 through the establishment of buying posts which supply central depots for dairying and packing. The United Africa Company now organizes this industry and has erected factories at Jos and Kano; the product is of a high quality and commands a ready market in the United Kingdom. In the Belgian Congo European farmers in 1936 produced 55,458 kilos of butter and 3,943 kilos of cheese.

V. AGRICULTURAL RESEARCH

Research work bearing on the problems of European and native agriculture is carried out by scientific bodies in Europe and South Africa, by the Agricultural Departments of the different territories, and to a certain extent by commercial organizations.

(a) *Institutions for Research in Great Britain*

In Great Britain the Royal Botanic Gardens at Kew and the British Museum of Natural History at South Kensington include

the study of tropical crop plants in the subjects of their research. The Imperial Mycological Institute for the study of plant-diseases is situated at Kew, and the Imperial Institute of Entomology, whose work on insect pests is relevant to the agricultural problems of Africa, is at the British Museum of Natural History. These two institutes, together with the eight Imperial Agricultural Bureaux which are located at research stations, co-ordinate information. The principal centre for general agricultural research in Britain is the Rothamsted Experimental Station at Harpenden, where the Soil Science Bureau is stationed. Soil science is studied here, at the Soil Laboratory at Oxford, and at the Macaulay Institute at Aberdeen. Work on plant genetics for crops other than herbage is done by the Plant Breeding Institute of the Cambridge School of Agriculture, where the Bureau of Plant Genetics (Crops) is situated; herbage plants are studied at the Welsh Plant Breeding Station at Aberystwyth, where the Bureau of Plant Genetics (Herbage) is situated. The East Malling Research Station in Kent, where the Fruit Production Bureau is stationed, is of much importance to Africa. The Low Temperature Research Station at Cambridge has made special studies in connexion with produce exported from Africa. The Institute of Agricultural Parasitology at St. Albans, where the Agricultural Parasitology Bureau is stationed, specializes in the study of plant pests. The work of the London School of Hygiene and Tropical Medicine is relevant to animal husbandry in so far as it deals with insects which attack stock as well as man. There is a veterinary research laboratory at Weybridge: the Bureau of Animal Health is stationed here. Animal nutrition is studied at the Rowett Research Institute at Aberdeen, where there is the Bureau of Animal Nutrition. Animal genetics are studied at the Institute of the University of Edinburgh, where the Animal Genetics Bureau is established. The Imperial Bureaux¹ publish abstracts of information, while the Imperial Institute publishes in its bulletin the results of research connected with the commercial development of agriculture. The centre for research and training in tropical agriculture for the British Empire is the Imperial College at Trinidad.

¹ See E. B. Worthington, *op. cit.*, chap. xi. See also Chap. XXIV, p. 1618.

(b) *Empire Cotton Growing Corporation*

The Empire Cotton Growing Corporation, which was established in 1921, maintains its own research stations in a number of British territories. The Corporation head-quarters for African research is at Barberton in the Transvaal, where the U₄ variety now grown over a very large area in southern and eastern Africa was first produced. From this station, where a staff of nine specialists is at work, the Corporation's research on insect pests throughout Africa is co-ordinated. In the Union they have a second station at Natal, with a staff of four, which carries out work under both rainfall and irrigation conditions. In Swaziland they maintain a station with one officer and an entomologist at Bremersdorp, with a sub-station in the low veld. In Southern Rhodesia the Gatooma station is maintained by government and staffed by the Corporation, and in Northern Rhodesia experimental work is carried out by an officer of the Corporation at Mazabuka. In Nyasaland they maintain a station at Domira Bay, with a staff of four officers who supply selected seed for the protectorate and have experimental plots in other areas. In Tanganyika they make a grant to the agricultural department for the maintenance of experimental stations at Morogoro, Kingolwira, Ukiriguru, Lubaga, Uzinza, and Mpanganya. In Uganda they contribute towards the maintenance of a cotton-seed farm, and have made grants for special post-graduate training to two members of the agricultural department. In West Africa they finance a seed farm at Daudawa in Nigeria.

(c) *Union of South Africa*

In South Africa the Faculty of Agriculture of the University of Stellenbosch was amalgamated in 1926 with the Elsenburg School of Agriculture to become the Stellenbosch-Elsenburg College of Agriculture. Pretoria University maintains a large agriculture experimental station, and the University of the Witwatersrand has since 1932 developed the Frankenwald Estate, acquired under the Beit bequest as a station for pasture research. Pretoria University gives a five-year course in veterinary science and a four-year course in agriculture. Of government organizations the veterinary

laboratories at Onderstepoort founded in 1902 carry out a comprehensive programme of research on stock diseases and in all aspects of animal industry. The work done on East Coast fever has already been mentioned, and work has been done on other tick-borne diseases.¹ A special laboratory for wool research was recently opened. The extensive study now in progress of the digestive system of ruminants is expected to have important results. Onderstepoort is now one of the best-equipped institutions of its kind in the world, and an especial feature of its work is the close touch maintained, through its field organization, with individual stock-breeders throughout the Union.

The Department of Agriculture has a number of sections devoted to research of different types; its main centre is at Pretoria. The economic research section has investigated costs of production of maize, butter and cheese, deciduous fruit, wool, and mohair. Soil research has included a general soil survey of the territory, and experiments with fertilizers and soil surveys for irrigation schemes. Grass and pasture research, which involves problems of the highest importance in the Union,² is being conducted over a wide range of country with varying soil and climatic conditions; there is a concentration on finger grasses, as being specially suited to most conditions. A field husbandry research section deals with the breeding of disease-resistant strains of maize, wheat, barley, and oats. At Rustenburg varieties of tobacco are under trial and experiments are made in connexion with flue-curing. A horticultural research section has also recently been created. Citrus investigations have been made at Nelspruit and Buffelspoort, and there is a special station for pineapples at Bathurst. Viticultural research is conducted at the Paarl station. The Low Temperature Research Laboratory at Capetown studies improvements in the methods of pre-cooling and storage of fruit for export. The African Explosives and Industries Company has carried out research on cereals and insecticides, and the Zebedelia Citrus Estate organizes its own research. The Sugar Association has a private experimental station at Mount Edgumbe. At the Natal Sugar Experiment Station investigation is carried out on behalf of the sugar industry, and

¹ See E. B. Worthington, *op. cit.*, chap. xiv.

² See Chap. XVI, pp. 1079 ff.

recently improved varieties of cane¹ have been selected and are said to be likely to replace the uba cane on many estates. There is therefore a wide range of inquiry being undertaken in the Union, but there does not appear to be any definite policy exercised in directing or co-ordinating investigations. Partly for this reason, the results obtained (while including some of the greatest importance) are of unequal merit.

(d) *Southern Rhodesia*

In Southern Rhodesia the Veterinary Research Station near Salisbury, founded in 1916, has studied the control of foot and mouth disease by intramucosal injection, and has investigated East Coast fever, heart-water, and horse-sickness. Research on trypanosomiasis is carried out at the Hillside Station. Cattle-breeding research has included a study of the comparative results of grading up with introduced animals or breeding from the Afrikaner type. There is a separate dairy research institute.

An agricultural experiment station was founded at Salisbury in 1909, and now has two branches, Salisbury and Hillside. Pasture research is carried out at Salisbury and at stations established for the purpose in 1929 at Marandellas, Matopos, and Rusape, where local grasses are selected and bred for grazing yields. The Trelawney Tobacco Research Station, maintained by contributions from government and the tobacco industry in equal amounts,² has done valuable work on nematode pests. The Tobacco Research Board prepares programmes of research work and controls a trust fund consisting of contributions from firms and individual growers.

A citrus research station at Mazoe is financed by the British South Africa Company.

(e) *British Colonial Areas*

Agricultural and veterinary laboratories were opened at Mazabuka in Northern Rhodesia in 1929. A veterinary section main-

¹ The best of these canes are said to be POJ 2725 and POJ 2878 from Java, and CO 290 from India. From 1927 to 1930 the cultivation of varieties other than uba was prohibited, except in quarantine, the aim being the eradication of mosaic disease. Since 1931 other varieties, including some already mentioned, have been released for general planting; they have been found generally resistant both to mosaic and streak disease.

² See the Tobacco Research Act, 24 of 1935.

tains pedigree and common breeds of cattle and sheep, chiefly blackhead Persians, for breeding research. Stations at Abercorn and Fort Jameson specialize in coffee and tobacco respectively, and a station to be devoted to problems of native agriculture was opened at Lunzua in 1935. In Nyasaland the head-quarters of research are at Zomba, and subsidiary stations are maintained at Port Herald, Makwapala, Lilongwe, and North Nyasa. The station at Mlanje is devoted entirely to tea research and has recently given special attention to the problem of poor fermentation of leaf grown in certain soils in the high rainfall belt.

The head-quarters of 'long-term' agricultural research for East Africa are at Amani, in Tanganyika, a station established in 1902 by the German administration.¹ The Agricultural Department for the territory has its head-quarters at Morogoro; for *arabica* coffee a research station was opened in 1933 at Lyamungu, with the assistance of a grant of £23,000 from the Colonial Development Fund to meet recurrent expenditure for the first five years. This station serves all East African territories, dealing mainly with cultivation methods; it has also studied the antestia pest and armillaria root disease. *Robusta* selection is done locally; for Tanganyika this is carried out by the Amani Station, and field experiments are made at the coffee training-centre at Nyakato, in Bukoba district. The Veterinary Department has a laboratory and experimental farm at Mpwapwa. The existence of a special Tsetse Research Department, which works in co-operation with the Health, Agricultural, and Veterinary Departments, is a unique feature of this territory.² Sisal growers have contributed funds for the establishment of an experimental station at Mlingano, near Tanga, which maintains co-operation with Amani. In addition, Tanganyika and Kenya sisal producers jointly have financed a scheme of consumption research which is being carried out from the linen industry research station at Lambeg in Ireland. The experimental work at Mlingano includes comparisons between the green and blue sisals, of which the latter (*Agave amaniensis*) shows great promise. An important result has been the greater measure of growth known to be attained by sisal kept free of weeds, as compared with that grown under other conditions.

¹ See below, p. 955.

² See Chap. XVII, p. 1132.

In Kenya the main centre for agricultural research is the Scott Agricultural Laboratory at Kabete,¹ which was first started as an experimental farm in 1907. There is a separate plant-breeding station at Njoro. Coffee has been the subject of much research which has included the control of pests, particularly mealy bug and *Antestia lineaticollis*; the latter appears to be capable of control by the use of finely ground pyrethrum, which is locally grown.

On the recommendation of Sir Alan Pim, a team of agricultural officers was appointed in 1937 to work on coffee research in co-operation with the research workers at Amani and Lyamungu in Tanganyika.²

The types of wheat now grown in Kenya have been evolved at the plant-breeding station, with the co-operation of plant pathologists in the study of rust diseases. Varieties of cotton are being tested at the Kibirani experimental station, and experiments are being made with Madagascar butter beans for strains resistant to 'yellow eye'; varieties are also sought which will be resistant to the bacterial blight, prevalent in wet conditions above 7,000 feet. An awned bulrush millet which is bird-proof has been introduced from Tanganyika as an improvement on local varieties.

Veterinary research, in addition to the study of rinderpest already mentioned,³ has also been concerned with tsetse research, the last in co-operation with the Tanganyika Tsetse Research Department. A government stock farm was opened at Naivasha in 1935 for work upon nutritional and genetic problems, particularly in connexion with mineral deficiencies in the pastures.⁴ Breeding experiments are carried out by means of artificial insemination.

Uganda has an agricultural laboratory at Kampala with four subsidiary experiment stations. A cotton experimental station was opened at Kadunguru in 1911, and there are now two selection stations; local study of the blackarm disease of cotton has had valuable results. A veterinary laboratory at Old Entebbe has made a special study of tuberculosis and East Coast fever, of which local workers believe Uganda to be the home. A special sub-laboratory was opened in 1932 for the manufacture of serum; this

¹ See below, p. 972.

² *Report on the Financial Position and System of Taxation in Kenya*, Colonial 116, 1936, p. 141.

³ See above, p. 934.

⁴ See Chap. XXIV, p. 1618.

would seem to present disadvantages in view of the small staff available and the fact that provision is also made in Kenya. There is no entomologist attached to the Veterinary Department, but it is held that field studies have produced knowledge of fly and tick areas sufficient for practical purposes. Stock farms are maintained at Koja, Sukulu, and Soroti, and native administrations maintain farms under the supervision of the Veterinary Department at Boroboro and Mbarara.

Bananas have been studied in Uganda, particularly with a view to control of the banana weevil by a predator introduced from Java. Coffee seedlings are reared from selected seed and are distributed by the Department of Agriculture. Wild varieties are being collected for breeding purposes, and good results are expected from a type found in the Imatong mountains in the southern Sudan, where conditions resemble those in the drier parts of Uganda.

Nigeria has research laboratories at Ibadan for the Southern and at Samaru for the Northern Provinces. In respect of soil investigations, the work done on the poor soils of the South-Eastern Provinces, known generally as Benin sands, may be mentioned; one result of this has shown that on the Owerri soils, which are deficient in phosphorus, the direct application of ground rock phosphate to a grain crop was less effective than the application to *Mucuna* beans used as a green manure.¹ Entomological work has included a study of the breeding-grounds of locusts, undertaken in collaboration with French authorities, and research on cotton stainers, yam beetles, the *Sahlbergella* bug of cacao, and the disease vectors of cassava mosaic and tobacco leaf-curl. The stock farm at Shika has paid special attention to the breeding of cattle for mixed farming. In the Northern Provinces selected cotton seed is distributed from the Empire Cotton Growing Corporation farm at Daudawa. In the Southern Provinces the problem has been to replace imported American cottons, which were found unsuitable, by an improved native variety; the improved Ishan type was first distributed in 1927 and is now in general use. Experiments in the crossing of Ishan with Sea Island cotton are being made in collaboration with the Empire Cotton Growing

¹ See below, p. 962.

Corporation's research station at St. Vincent.¹ Cacao research began at the Moor Plantation in 1930, and is carried on in collaboration with the Imperial College of Tropical Agriculture in Trinidad. The Ibadan native authority finances a special selection farm. The selection of cowpeas resistant to nematode attack has been begun in Nigeria, and trials are being made at Moor Plantation with *robusta* coffee seed introduced from Java, and with citrus fruits.

Oil-palm selection was started at Calabar in 1927, and additional experiment stations established since that date now extend over 77 acres. High-yielding varieties have been selected.

In the Gold Coast the central agricultural laboratories are at Accra, and there are experimental stations at Tamale, Asuansi, Kumasi, and Kpeve in Togoland. The Tamale station has carried out cultivation and manure trials with yams, cassava, ground-nuts, rice, and grasses. Asuansi has specialized in citrus and bananas. Kpeve studies crops typical of the forest and savannah belts; Kumasi is a centre for botanical work on cassava breeding and selection, but is mainly organized as a demonstration station for the training of agricultural students.² Recent entomological work has included study of the cacao moth and the fruit-piercing moth which attacks citrus; soil surveys with special reference to cacao have been carried out in co-operation with cacao research in Trinidad. An advantage of the new experiment station at Tafo is that it is nearer to the laboratory head-quarters than the older experiment stations. The research staff consists of an entomologist, a botanist, a chemist, and a plant pathologist. Valuable veterinary research work is carried out at Pong-Tamale.

In Sierra Leone the laboratories are at Njala. Research into oil palms is carried on at the Masanki plantation; the conclusion reached is that the imported varieties are superior. Experiments are made in breeding Deli palms and Angola palms from the Congo. Rices for cultivation on naturally flooded lands are tested at Scarcies in Sierra Leone, where varieties from India, Ceylon, British Guiana, and Indo-China have been introduced, and pure-line strains are selected from local varieties. At Njala similar work is done for inland swamp and hill rices.

¹ See above, p. 945.

² See below, p. 968.

(f) *Other Territories*

In France the *Musée National d'Histoire Naturelle* has a section devoted to colonial plants and tropical agriculture, and the *Institut National d'Agronomie Coloniale*, which was founded for the training of colonial agricultural officers, is expected to develop eventually as a centre for research. Both institutions are situated in Paris.

In French territories 'long-term' research is for the most part organized by visits of specialists from institutions in France, and the research work done by the colonial personnel consists mainly in plant and animal breeding.

The most important centre for agricultural research in French West Africa is that maintained by the Niger Office at Ségou in connexion with its irrigation schemes; the staff includes agricultural chemists, an entomologist, and also plant breeders and plant pathologists. There are also agricultural stations at M'Bambey in Senegal, Kindia and Kankan in Guinea, La Mé, Bingerville, and Gagnoa in the Ivory Coast, and Pobé, Niaouli, and Ina in Dahomey. The principal animal-husbandry station is at Sotubà in the Sudan; in this colony there are also three minor stations for merino, karakal sheep, and goats, at El-Ouladji, Nioro, and Nara. In the Ivory Coast there are stations at Bouaké and Koroko; in Dahomey the Ina station has a veterinary branch and Mauretania has an experimental sheep farm at Maderdra. The headquarters of research on animal diseases is at Bamako in the Sudan, which co-operates with the Pasteur Institute laboratory at Kindia. Cacao is studied at Bingerville and Gagnoa, banana cultivation at Gagnoa, rice selection at Kankan, selection for groundnuts at most stations, and oil-palm selection at La Mé and Pobe. M'Bambey is a centre for research on groundnuts.¹

French Equatorial Africa has four cotton-selection stations and a small coffee experimental station. In the Cameroons cacao and *robusta* coffee selection work is done at Ebolowa, and a station at Dschang specializes in *arabica* coffee and in experiments with

¹ M. Sagout, 'Exposés des travaux de sélection généalogiques de l'arachide et des résultats obtenus à la station expérimentale de M'Bambey', *Bulletin mensuel de l'Agence économique de l'A.O.F.*, 1937, pp. 351-4.

introduced plants. At Dschang there is also an experimental farm which concentrates on the breeding of small stock and poultry.

In Belgium the State Botanical Garden at Brussels has a large collection of tropical plants; the Botanical Department of the *Musée du Congo Belge* at Tervueren was merged with it in 1934. The University of Louvain has devoted much attention to the study of colonial agricultural problems. It has an institute for research in soil science, and since 1931 has organized its own research centres in the colony for the purpose of improving native agricultural methods, with special reference to the cultivation of food crops; the organization is known as the *Cadulac* (*Centres Agronomiques de l'Université de Louvain au Congo*). In the Belgian Congo both agricultural and veterinary research is carried out by the *Institut National pour l'Étude Agronomique du Congo Belge* (*Inéac*) established in 1933. The principal experimental stations of the *Inéac* are Yangambi, where cultural methods for rubber, oil palms, coffee, and native food crops are studied; Gazi, where the work is concentrated on rubber and cacao; Lula, in connexion with *robusta* coffee; and Bacumba, which has given special attention to the regeneration of exhausted soils and has plantations of oil palms and cacao. Cotton stations at Bambesa and Gandajika study the control of pests in addition to selection work: only seed approved by *Inéac* is distributed to native cultivators. The principal work of the stock farm at Nioka, near Lake Albert, is the improvement of native cattle in connexion with mixed farming; it also carries out research on food crops and coffee.¹

In Portuguese East Africa a central laboratory for veterinary pathology at Lourenço-Marques is conducted in connexion with an experimental farm and a number of subsidiary farms in the principal cattle areas. Angola has a veterinary laboratory in the highlands and stock farms in the Ganda, Humpata, Cuanhama, and Quilengues districts. With the exception of Humpata, which specializes in the production of wool, milk, and working beasts, these are mainly devoted to the breeding of cattle and sheep for export.

¹ See E. B. Worthington, *op. cit.*, chap. xi.

(g) Ecological Surveys

A special type of field research that has been developed in some British territories, particularly in Northern Rhodesia, is the agricultural or ecological survey. In Uganda the so-called *mutala*¹ surveys are organized by a committee appointed in 1935. Each survey consists of a close examination of the social life and agricultural activities of the people concerned; the study of nutrition has recently been added. Nineteen surveys have been instituted, largely to provide a basis for the redistribution of population from areas where soil fertility is becoming exhausted; as in all inquiries of this nature, carried out by a number of officers of different training and experience, the results are unequal, though they contain much useful information. An ecological survey of a different class is being carried out in Northern Rhodesia by an ecologist and an agricultural officer. Work has been completed in the north-western part of the territory² and is continuing in the eastern areas; it consists of an intensive examination of soil conditions, water supplies, population density, existing systems of agriculture, and the possibilities of the development of cash crops.

(h) The Co-ordination of Research³

In the circumstances of Africa, the term 'research' has, as is noted in dealing with the problems of health, acquired a much wider meaning than would be usual in Europe. The institutions for research to which reference is made in the preceding sections belong to a variety of classes. At the top of the scale there are institutions where an adequate team of workers, free from routine work, are able to devote themselves to the investigation of problems requiring a detached study; at the other end, there are cases where a small staff is faced with a great mass of routine work, much of which would in Europe devolve on qualified assistants, and can spare but little time to deal with the more urgent of the local problems requiring investigation. In the British territories it has been customary for each administration to appoint specialist

¹ *Mutala* is the vernacular name for the hill slopes divided by swampy valleys on which the villages and gardens stand.

² C. G. Trapnell and J. N. Clothier, *op. cit.*

³ See Chap. XXIV, *passim*.

officers to its staff, sometimes on the general principle that the problems of the territory need separate study, sometimes in reply to a definite demand from those, such as the growers of sisal or coffee, or the exporters of palm oil, whose output has suffered from crop disease, or who have desired to improve the quality of their production. In principle, the general co-ordination of agricultural policy, including the direction of specialist inquiries, is sought through the Colonial Advisory Council of Agriculture and Animal Health, acting partly on the annual reports issued by the Agricultural Department in each territory, partly on the results of the periodical visits to Africa of the Agricultural Adviser to the Secretary of State. Valuable as are these visits and the recommendations made by the Advisory Council, they do not constitute a co-ordination of research policy, in the sense in which the word would ordinarily be used. To a certain extent the inquiries made by specialist officers are dictated by circumstances, such as the marked prevalence of a pest or disease, or a request made by the interests which have influenced the creation of the specialist post; but for the rest there is no system in force by which, for example, problems awaiting inquiry can be distributed over the staff of the different territories concerned, or the preparation of sera or vaccines required by the animal-health staff can be centralized. Making full allowance for the fact that the personal interest or experience of the worker is a factor of primary importance in the success of any form of scientific inquiry, the failure to establish any system for the co-ordination of work of this class is nevertheless unfortunate; that in some cases it leads to overlapping of effort is obvious, while in others inquiry is undertaken which should clearly be left to those who are better situated in regard to both experience and equipment. It is difficult to believe that under this system it is possible to make the best use of the small resources available for research into the problems of agriculture and animal husbandry.¹

For the East African territories some attempt was made to systematize agricultural research through the Amani Station, which was constituted as a centre of research for Kenya, Uganda, Tanganyika, and Zanzibar in 1925. Its scientific staff consists of the

¹ See Chap. XXIV, p. 1632.

director, a plant pathologist, an entomologist, a soil chemist, a bio-chemist, a plant physiologist, a plant geneticist, and a botanist. The aim of the centre is to study problems requiring more prolonged research work than can normally be expected from the technical staff of any single administrative department, and problems arising in more than one territory towards the solution of which the comparative method may be expected to make an effective contribution.¹ The Institute has, however, no control over the work done in other centres and it does not act as a co-ordinating body. It has at the same time a useful function as a centre of information and advice; members of its staff are available to undertake work in the different territories which cannot be done by local officers, and provision can be made for local officers to visit Amani for work on long-range problems such as soil studies. It is of some interest to note the nature of the work done by the Station within the specific field allotted to its own activities. In co-operation with agricultural chemists in various territories, a provisional soil map of East Africa has been compiled on the basis of material supplied at two inter-territorial conferences of agricultural chemists. A special study has been made of the ecology of the antestia pest of coffee, and work has been done in connexion with the mosaic pest of cassava, and locust research. Work on essential oil-yielding plants has received considerable attention, and in studying the physiology of coffee in relation to environment, important results bearing on the influences of shade on the physiological processes of the *arabica* coffee bush have been obtained. Extensive study of the rooting habits of coffee has yielded much valuable information, in particular as to the class of soil best suited for plantations. Sisal physiology has been included in the programme of research. In recent years 'physiological ecology', or the study of the plant's physiological functions in the field, has been considerably developed; it has, for example, been discovered that 'yellows' in tea can be prevented by applications of sulphur. Genetic studies have been made on coffee and sisal, and some research has been done on cinchona cultivation.

Much of the inquiry undertaken is, therefore, of the detached or (to use the term frequently employed in this connexion) 'long-

¹ Imperial Agricultural Research Conference, 1927, *Report*.

range' character. But it is seldom possible to establish on a *priori* grounds any clear-cut line between long-range and short-range inquiry, and the Station has, as already shown, also undertaken a range of inquiry into the planting problems of coffee, carried out in association with Lyamungu, or again into the cultivation of *Derris* and *Mundulea* (with a view to establishing them as local crops), which does not fall into the category of long-range work.

Conferences of directors of agriculture and research workers from all the East African territories, including Nyasaland and Northern Rhodesia, have been held in 1931, 1933, and 1936. Periodic joint conferences of medical and veterinary research workers in East Africa have been held at various centres, and at one time a proposal was made to develop the Kabete laboratories in Kenya as a central veterinary research institution for East Africa. It was contended that centralized research was more definitely required in connexion with animal diseases than in connexion with agricultural problems, since local variations between the different territories are less significant.¹

The isolation of Agricultural Departments in West Africa was the subject of comment by Sir Frank Stockdale, the Agricultural Adviser to the Colonial Office, after his tour of inspection in 1935-6;² he urged that opportunities should be afforded by the various administrations for exchange visits and the holding of conferences at which common problems could be discussed. Two such conferences had previously been held, in Nigeria in 1927 and the Gold Coast in 1929, but the practice had been discontinued on grounds of economy. Exchange visits are represented so far by the visit of an agriculturist to Nigeria from Sierra Leone in connexion with swamp-rice cultivation and from the Gold Coast in connexion with the study of mixed farming. It is suggested that exchanges might be arranged between all three territories, of persons engaged in fruit investigations.

Sources of information on the work done in each British territory are the annual reports of the Agricultural and Veterinary Departments and the periodical bulletins of a more or less popular nature which are issued for the guidance of local farmers, European and

¹ See Chap. XXIV, p. 1632.

² *Report*, op. cit., C.A.C. 270, 1936, p. 7.

native. A common arrangement for annual departmental reports was introduced by the Agricultural Adviser to the Secretary of State in 1936, but they contain in some cases material which is of no general interest. Sufficient attention is not paid to the need to distinguish between matters of strictly departmental interest (which need not necessarily be published) and those which are of public interest or permanent value. In the Union the Department of Agriculture issues a monthly publication, *Farming in South Africa*, and the Southern Rhodesia Department publishes a monthly agricultural journal. The *East African Agricultural Journal*, edited by the director of Amani and first published in 1935, contains articles on agricultural subjects contributed by members of all the East African Departments; more technical publications are the Amani memoirs, in which the results of specific investigations are published.

For West Africa there are fewer sources of information. The Nigerian Department began the publication of an annual bulletin in 1922, but this was discontinued during the economic depression, as was a similar publication, the *Gold Coast Year-Book of Agriculture*. Sir Frank Stockdale has recommended the re-issue of the former on the ground that the exchange of information on problems common to the West African territories is highly desirable.¹ A monthly publication, *The Gold Coast Farmer*, is issued by the Department of Agriculture.

The system followed in the French territories, by which research is under the direction of scientific institutions in Paris, and the work of local officers is largely confined to field inquiries,² makes for closer co-ordination of effort than in British territories, and for some considerable economy in staff; though it leaves less scope for individual initiative, and also perhaps takes less account of the variety of needs arising from local circumstances. No departmental reports are published, but some general information on agricultural subjects is given in the general reports issued annually from each of the mandated territories. The annual report of the Belgian Congo, and that of the mandated territory of Ruanda-Urundi, also give some general information, but no annual departmental reports are published for the Belgian areas.

¹ *Report*, op. cit., C.A.C. 270, 1936, p. 8.

² See above, p. 952.

(i) *Statistics*

In the main the statistics of cultivation and production in Africa are only estimates based on material of very varying value. Lands held by Europeans have for the most part been surveyed, so far at least as is needed to establish their boundaries and area; but with the exception of the relatively small areas held by natives in individual right in South Africa or Southern Rhodesia, or the native *immatriculé* areas¹ in French colonies, or the lands measured by a native administration survey, as in Kano,² lands in native occupation have not been cadastrally surveyed. The market figures give a sufficiently accurate basis for calculating the total annual output of certain types of crops grown mainly for export; but these figures cannot be related to the acreage under cultivation. Nor is it at present possible to calculate accurately the output per acre of different types of native crops; experience shows that, even where a cadastral survey exists, estimates of output based on the results of experiments at state farms or institutions need to be checked by measurements of output on surveyed areas of considerable size, cultivated under normal conditions. The measurements of output which are made annually over the large areas of controlled cultivation on the Gezira canal in the Anglo-Egyptian Sudan³ constitute a good example of such a check. Accurate statistics of native production cannot be obtained until some kind of cadastral survey has been made, and some systematized method of observing and recording output has been introduced. The making of a cadastral survey has, however, usually been necessitated as the result of a system of taxation which bases revenue on the land, or has followed the evolution of a system of individual rights, to which economic circumstances give a transferable value. It is not likely that circumstances will in any near future necessitate the making of a survey on any large scale, and thus prepare the way for the institution of a satisfactory system of statistics of cultivation and cropping.⁴ Meanwhile it may be advisable for British administrations to consider whether they will in the future adopt the decimal

¹ See Chap. XII, pp. 354 ff.

² See Chap. IX, p. 427.

³ See Chap. XV, pp. 1933-5.

⁴ For the question of the survey of land, and the record of rights, see Chap. XII, pp. 376-8.

system or the British system for the purpose of land measurements. British African dependencies already suffer from the infliction of the British system of weights; it would be unfortunate if in addition they had to bear for all time the eccentricities of the British system of surface measurement.

VI. THE IMPROVEMENT OF NATIVE AGRICULTURE

It is clear that the most urgent problem in all territories is the introduction of methods which will maintain soil fertility without extensive recourse to shifting cultivation.¹ But if new methods of fertilization are to win their way, they must be adapted to the financial and labour resources of the average native farmer, and it would seem therefore that they must be based on natural processes rather than on the use of artificial fertilizers. An examination of the present methods used by natives to produce food or cash crops will reveal a planned effort, the balance of which may easily be upset by ill-considered innovations. Cotton production in Southern Nigeria, for example, is combined with the cultivation of yams, maize, and beans, and the crops are planted at varying times and are not necessarily harvested in the order in which they were planted; hence the variation in the times of maturity allows a suitable distribution of labour, the soil is generally well covered, weeded, and cultivated, and full use is taken of the available soil fertility; it is also said that the possibility of crop failure through insect attack is diminished. Such a system is of proved value in native eyes and is peculiarly adapted to native conditions of life; it needs careful study before improvements can be recommended which are not only sound in themselves but will appeal to the cultivators.

Methods of improvement in regard to shifting cultivation which have suggested themselves as suitable to native resources are:—green manuring, which was first studied in Nigeria and is now extensively used in that territory; the more scientific rotation of crops, based on careful studies of the present native system; and composting, which has been regarded as better adapted to native methods than green manuring.² Another important step

¹ See above, p. 879.

² Sir A. D. Hall, *The Improvement of Native Agriculture in relation to Population and Public Health*, 1936, pp. 34, 38.

in the improvement of agricultural methods is the development of mixed farming, such as is already practised in some parts of Nigeria.

Again, it is clear that much can be done to improve types of seed. The usual practice in the case of cash crops is for seed to be set aside for use without any special method of collection. Seed farms are maintained in most territories in connexion with export crops, and in some cases they are run by the native authorities, but it is clear that if a continuous supply of planting material is to be maintained, considerable extension of this method of supply is necessary. There is need for agricultural education, not only by the provision of holdings where methods can be tried out under supervision, but also by the training of African staff to assist in the Agricultural Departments, to be demonstrators in the native areas and advisers to the native authorities. It will be necessary to give a concise account of these measures, and also to describe the problem of the control of plant pests and diseases.

The improvement of cash crops is important, but the primary aim among a people who are almost entirely dependent on their individual agricultural efforts for their food must be the improvement of subsistence crops in such a way as to maintain or increase production in spite of the difficulties involved by the changing conditions.¹ Malnutrition, which is widespread among African peoples, results, as has been remarked elsewhere,² in low resistance to disease, and French authorities have gone so far as to assert that shortage of food is the most serious obstacle to the increase of population. In some territories there is evidence that the cultivation of commercial crops has already led to the neglect of food crops; and both in the Gold Coast cacao regions and the Bukoba coffee area of Tanganyika, farmers are beginning to depend on bought food. Scientifically based measures for improvement of native diet await the results of research into the problems of native nutrition; in the meantime, however, agricultural research can be directed towards improvements in the yield of crops grown by natives, and towards popularizing introduced food plants.

¹ See above, p. 884.

² See Chap. XVII, pp. 1122-4.

(a) Methods of improving Soil Fertility

Green manuring, the digging in of green-stuff as soon as the land goes out of cultivation, is perhaps better adapted to plantation cultivation and settler farming than to native plots. In Southern Nigeria, however, green manuring with *Mucuna* (the Bengal Bean) has been found effective, nor is the practice alien to native systems, as the digging in of weeds is a common practice. *Mucuna* has the disadvantage in native eyes that it may occupy the land during a full season to the exclusion of a food or cash crop, and the increased yield in the following season is not recognized as compensation for this. It seems that investigation must be directed to the production of a green manure which will also thrive as a food crop. In East Africa conditions are often too dry for the use of green manures, and in Uganda permanent cover crops were found to reduce the yield of coffee. In the irrigated areas of the French Sudan it is believed that green manuring will make fallowing unnecessary. On this point, however, further experience is clearly necessary, especially in view of the history of cotton growing on irrigated lands in the Anglo-Egyptian Sudan.¹

Experiments in crop rotations have been made in Nyasaland and Northern Rhodesia, and in the latter a system incorporating maize, cotton, groundnuts, and beans is being developed. In Uganda trials in the rotation of elephant grass with cotton and food crops are in progress at Bukalasa, where land left under the grass for three years has been proved to regain its fertility; the roots act as a soil condition improver, and the luxuriant top growth provides material for mulching. Cassava has also been found useful as a rotation crop, and in Nigeria a rotation of yams, cotton, groundnuts, and maize has been found suitable.

A method of composting, in which vegetable waste and animal manure are kept in pits and turned and watered at regular intervals until fermentation is completed, has been suggested as suitable in native conditions.² In Nigeria trials in a mixed farming area gave results less satisfactory than those obtained with animal

¹ See Chap. XV, pp. 1053-5.

² See Sir A. D. Hall, *op. cit.*, pp. 34-8, and Sir A. Howard and Y. D. Wad, *The Waste Products of Agriculture*, 1931.

manure. In Kenya, however, compost, which does not involve a drain on soil moisture, was found preferable to green manuring in the drier maize-growing areas, and a factory was started in Nairobi in 1934-5 for the manufacture of compost from refuse such as bone residues, animal manure, cotton seed, and wood and tanning waste. African cultivators have not, however, readily adopted composting owing to the additional labour involved in the collection of waste products and the regular routine of watering and turning. In Uganda composting is an alternative use of cotton seed, which is at present exported, but lack of water makes it difficult in the dry season. In Tanganyika and Nyasaland experiments are also being made with composting.

The development of mixed farming, which many believe can alone make permanent cultivation possible, is limited in large areas owing to tsetse-fly. It received its first impetus from experience in Northern Nigeria, where the marked effect of even a small application of animal manure was observed in areas which are too dry for green manuring to be possible. After suitable cattle had been bred, housed, and trained to farm work, and appropriate fodder crops found for them, mixed farming was introduced on holdings set aside on government farms. Three farmers took up holdings in 1928; in 1936 the number was 1,053 and it is hoped that in five years it will reach 10,000, the system having been widely adopted on private holdings. It has been demonstrated that with a pair of working bullocks one man can cultivate 8 to 15 acres as against three by the hoe.¹ Native administration demonstration farms help to popularize the system, and the native treasuries make advances for the purchase of stock and implements, which are repaid over a period of four years; the transference of this enterprise to a co-operative society is under consideration. Limitation of the size of holdings to an area which can be efficiently worked is recommended by Sir Frank Stockdale.² The test of the method must be its ability to survive periods of serious drought. The Gold Coast Northern Territories have decided to develop mixed farming on Nigerian lines. Its extension to the tsetse belt of Nigeria depends upon the introduction of cattle tolerant of the

¹ See O. T. Faulkner and J. R. Mackie, *op. cit.*, p. 66.

² *Report*, *op. cit.*, C.A.C. 270, 1936, p. 28.

local trypanosome, for the Nigerian dwarf cattle are useless for draught purposes; herds imported from the Gold Coast Northern Territories have given promising results. A further study of the possibilities of introducing resistant types of cattle on a reasonably large scale is held to be necessary. The class of cultivation found in Northern Nigeria, and the fact that the native administrations there had sufficient resources to stimulate the practice of mixed farming, created circumstances unusually favourable to its introduction. There are strong arguments in favour of its introduction in other areas where physical circumstances permit it; but in the absence of equally favourable conditions, it is not reasonable to expect that it will have so general or so rapid an expansion.

(b) Agricultural Education

In dealing with certain of the other technical departments, such as those of Health and Forestry, occasion has been taken to remark that expansion in the activity of the department must depend largely on the training of African assistants qualified to undertake posts of responsibility.¹ In the British territories it is not unusual to find fully trained European officers of the Departments of Agriculture and Animal Husbandry discharging duties which would elsewhere be entrusted to trained assistants; instances are seen not only in operations of a partially administrative nature, such as the supervision of the marketing of cotton, or the charge of experimental farms, but in laboratory work, as, for instance, the preparation of vaccines or sera. This observation does not apply with equal force to the French territories, where the less technical work of the departments is often discharged by members of the general administrative staff, and some of the purely technical work is carried out by European subordinates. The same is true of the Belgian territories. So far, no systematic steps have been taken in British territories to train Africans as fully qualified assistants in the agricultural or veterinary services; but the development at Makerere of advanced courses of training in agricultural and veterinary science for students from all East African territories was one of the recommendations of the

¹ See Chap. XIV, p. 1020, and Chap. XVII, p. 1182.

1937 Commission on Higher Education in East Africa.¹ The inadequacy of the provision made for training assistants in West Africa has been the subject of comment by Sir Frank Stockdale, who in 1936 recommended the formation of a joint policy by the Directors of Education and Agriculture of the four West African territories.²

On the other hand, there exists in most territories some provision for training subordinates of a lower rank. A number of details will be found in the section of the chapter on education which deals with vocational training; some further details are added here. In the Union of South Africa officially organized agricultural education of Africans began with the creation in 1929 of the separate agriculture section of the Native Affairs Department. The four schools of agriculture³ have stock farms, but leave seed selection to the central research stations, a policy which seems to allow insufficient experiment for reaction to local conditions. Selected students work as demonstrators on plots of about 2 acres, using implements supplied by the Department of Native Affairs, or, in the case of the Transkei, by the United Transkeian Territories General Council. Improved seed and fertilizers are introduced in the second year of demonstration. Assistance is given in the castration and culling of stock and the introduction of better sires, and a demonstration caravan tours the territories every year. The Director of Agriculture estimated in 1932 that a minimum of 400 demonstrators would be necessary to make any real impression, and the Native Economic Commission regarded this as a conservative estimate;⁴ in 1936 the number employed was 152. The Interdepartmental Committee on Education of 1935 recommended that demonstrators should also advise primary teachers in connexion with their work in school gardens, and that a specialized teacher of agriculture should be appointed to the staff of every training school.⁵ The possibilities of improvement, however, are limited by the fact that many natives do not possess draught animals and cannot afford to buy implements, and by the absence of a great number from home at times when their gardens

¹ Colonial 142, 1937, pp. 93-5, 101-4.

² *Report*, op. cit., C.A.C. 270, 1936, p. 6.

³ See Chap. XVIII, p. 1222, and Chap. IX, p. 355.

⁴ *Report*, U.G. 22, 1932, paras. 100-2.

⁵ *Report*, U.G. 29, 1936, paras. 564, 572.

require attention. It has been suggested that these difficulties would be overcome by the introduction of collective farming by organized groups, who would pool labour and implements and undertake to carry out the necessary seasonal operations at the proper time.¹ It is estimated that this would effect a reduction of 50-75 per cent. in the labour units required, but it is not clear how such groups are to be organized. The Transkeian Territories General Council issues an agricultural journal in English and Xhosa, which is edited by the Director of Agriculture and has over 3,000 subscribers.

Demonstrators, trained in the Union, are employed in Basutoland and Swaziland, but not in Bechuanaland, where agricultural questions are less important than pastoral.

The organization of native education in Southern Rhodesia as an integral part of schemes for native development is mentioned elsewhere.² Here control is exercised over methods of cultivation on land allocated on individual tenure in the native purchase area. Demonstrators are trained at Domboshawa.³ In Northern Rhodesia it is held that propaganda should be delayed until more knowledge is available as to the value of native systems, and specially trained demonstrators are not employed. In Nyasaland native demonstrators acquire their knowledge while working for the Agricultural Department, special courses of instruction being arranged as opportunity offers.

Tanganyika employs a considerable African personnel trained in the Union; the instructors attached to the native authority farms have no special training other than the agricultural course in central schools. The training in coffee growing given at the Nyakato school⁴ is intended as a preparation for farmers rather than as a training for employment under the department; some pupils, however, are employed as instructors. Ploughing schools are maintained at Itheme and Lubaga.

In Kenya a separate staff for the development of native agriculture was first created in 1923, and the work done consisted in direct instruction of native cultivators and the maintenance of

¹ Department of Native Affairs, *Annual Report*, 1935-6, p. 38.

² See Chap. XVIII, pp. 1226-9.

⁴ See above, p. 948.

³ *Ibid.*, p. 1229.

small demonstration plots. In 1931, however, these were abandoned in favour of the establishment of large seed farms at local native council head-quarters, where experimental work is done at the expense of government and seed production is financed by the councils, who also pay the salaries of native demonstrators. The demonstrators are trained at Bukura in the Nyanza Province, where the course lasts for three years and is also designed to fit students to take up peasant holdings. In 1936 there were 157 native demonstrators and grain inspectors at work in Nyanza Province and 173 in the Central Province. In the latter province district education boards¹ employ native instructors who visit schools, lecture, and advise on school garden work. To meet the special circumstances of the Suk in Kenya, a tribe of some 20,000 people in the arid Turkana Province, who were found to be in a chronic state of under-nourishment, a school was opened in 1930, which, besides giving the usual primary education, concentrates on practical instruction in the cultivation of supplementary food crops. The extension through the tribe of the new crops is organized by means of demonstration plots managed by former pupils of the school.

In Uganda agricultural assistants take a five years' course, partly at Makerere² and partly at the Agricultural Department's stations. Instructors receive a shorter training of two months; it has not been found possible to give a longer course owing to the numbers requiring to be trained. At Bukalasa and Serere courses for chiefs, lasting from a fortnight to two months, have been held in connexion with the small-holders' courses, and regular training and refresher courses are arranged for school teachers. African agricultural assistants help in the organization of school gardens.

In Nigeria, in addition to the mixed farming schemes, oil palm demonstration plots have been established by native administrations and at schools. Four students of Yaba College³ were appointed, after a two-year course at Ibadan, as agricultural assistants in 1936. Sir Frank Stockdale is of the opinion that the practical course should be increased to three years, as the training given at Yaba is largely theoretical.⁴ In Nigeria general propaganda

¹ See Chap. XVIII, p. 1230.

² *Ibid.*, p. 1248.

³ See Chap. XVIII, p. 1249.

⁴ *Report*, op. cit., 1936, p. 36.

has been found ineffective; the method preferred is that selected native farmers are induced to undertake trials on their own farms, under the supervision of the agricultural officers, where the results can be observed by their neighbours. Thorough testing in advance of the innovations introduced by this method has been found essential in order to avoid the suspicion of foreign methods which is inevitably created by a failure.¹

In the Gold Coast native agricultural assistants undergo a two years' course at Kumasi, where also courses of four months for farmers are held. In the Gambia special training of an elementary nature has only recently been instituted, and in the Bulok District a scheme has been introduced in collaboration with the native authority whereby model gardens are made at certain villages by the combined work of men from all over the district. In Sierra Leone teachers' courses in agriculture have been instituted, and a four years' training course, of which two years are spent at the Mbang Academy and two at the Njala Experiment Station, has been organized by means of a scholarship scheme.

In French West Africa the training of teachers for rural schools is given at two centres in the Sudan and Guinea, which have been selected as typical of the dry steppe land and the forest belt respectively, where the agricultural methods which it is intended to disseminate may be taught in the appropriate environment. The more advanced regional schools have farms worked on a commercial basis, and ploughs and oxen are lent to selected pupils on leaving, and become their property if they are put to satisfactory use.

Among other means of encouraging the adoption of improvements is the organization of agricultural shows, which have been particularly successful in the Transkeian Territories and the Lake Province of Tanganyika. Similar shows were held in Kenya until the economic depression, and the Nairobi Agricultural Show, though mainly for European produce, has a section for native exhibits. The Transkei has also introduced maize-growing competitions which have resulted in a great improvement in yields.

Some reference to the use of films and broadcasting will be found in a later chapter.²

¹ See O. T. Faulkner and J. R. Mackie, *op. cit.*, pp. 76 ff.

² See Chap. XVIII, pp. 1297-305.

(c) Smallholdings

In Tanganyika 'ideal holdings' for the demonstration of mixed farming are attached to the experiment station at Lubaga and to all native authority seed farms. Two schemes for organized settlement are now in existence, at Nyamahona, attached to the Ukiriguru experimental station in Mwanza District, and at Kingolwira, attached to the Morogoro station in the Eastern Province. At Nyamahona 10,000 acres have been reserved for controlled settlement, and 140 holdings of 20 acres had been taken up by 1936. The Kingolwira settlement covers some 3,000 acres, and 25 holdings had been allotted by 1936.¹ At the Lubaga station there is an adult school where couples are trained with a view to taking up mixed farming at their own homes.

- In Uganda the training of smallholders was started at the experimental stations at Bukalasa and Serere in 1932-3; holdings vary in size from 8 to 20 acres, and it has been suggested that more effective training could be given with a larger number of small unit holdings.² The native government makes loans for the equipment of persons who have completed the training. The extension of this system is recommended as the only means of development of the densely populated areas of the Eastern Province, but the difficulty has to be met that it is not always possible to obtain sufficient land for an economic holding. For purposes of supervision Sir Frank Stockdale suggested that small settlements are more satisfactory than scattered single holdings.

(d) Control of Plant Pests and Diseases³

Under primitive conditions of agriculture the isolation of cultivated areas provided some protection against the spread of pests and diseases, but the extension of agricultural activities has necessitated the introduction of measures of control. These measures have, in particular, been pressed on administrations where native and European plantations are found in the same area, and certain native crops are thought to be potential sources

¹ For a fuller account, see *Annual Report to the League of Nations on Tanganyika Territory*, 1937, p. 213.

² Sir F. Stockdale, *Report on his Visit to East Africa*, C.A.C. 345, 1937, p. 64.

³ See also E. B. Worthington, *op. cit.*, chaps. vi and x.

of infection. Thus, in Kenya, the cultivation of coffee by natives was, until recently, discouraged, and the areas in which it has now been experimentally introduced do not include the neighbourhood of European plantations.

In the Transkeian Territories the eradication of noxious weeds has been encouraged by means of competitions between the children at different schools. In several of the British territories measures of legal control have been introduced. Thus in Tanganyika, regulations under the Plant Pest and Disease Ordinance¹ of 1921 control the cultivation of tobacco and coffee. The latter empower agricultural officers to order the destruction of plants on unoccupied land, or of diseased crops, to compel growers to keep chemicals for spraying, and to require the eradication of wild plants which may be a source of infection. Native authorities in coffee-growing districts have adopted these regulations and thus become responsible for their enforcement,² and as a result the output and the freedom from pests of native coffee compares favourably with that in European estates, where control is much more difficult to exercise. Cotton cultivation is regulated by a special ordinance³ under which only selected seed may be planted; land on which cotton is grown must be kept free of grass, and insect pests collected and destroyed by fire. After the harvest a fixed date may be prescribed by which all cotton must be uprooted and further planting may be forbidden until another prescribed date. The storing of unginned cotton, except in approved premises, and its removal from one district to another, may also be prohibited. An amendment to the Uganda Cotton Ordinance, giving power to fix dates before and after which planting should be illegal, was recommended in 1936. In this territory the Bugishu Coffee Scheme limits the distribution of seed to farmers whose crops are kept in a satisfactory state. The Native Authority Ordinance provides for the destruction of cotton by a fixed date each season in order to prevent the spread of pink bollworm, and also for the compulsory eradication of coffee infested with pests. The intro-

¹ *Laws*, cap. 77, since replaced by Ordinance 9 of 1937, designed in accordance with the recommendations made at the Conference on the Co-ordination of Agricultural Research and Plant Protection held in 1934. A similar ordinance (24 of 1937) has been introduced in Kenya.

² See Chap. IX, p. 450.

³ *Laws*, cap. 80.

duction of additional control measures, however, has been made difficult by the opposition of the Buganda Lukiko.¹

In the Gold Coast a Plant Pests and Diseases Ordinance was first introduced in 1937, to meet the damage done by a new disease of cacao known as swollen shoot, and by attacks on citrus by fruit-piercing moths. In the Gambia orders of a similar type are issued by native authorities. In the French Cameroons, legislation introduced in 1934 empowers the local authorities to prescribe methods of cultivation or the destruction of infested plants.

VII. THE IMPROVEMENT OF ANIMAL HUSBANDRY

(a) *The Improvement and Conservation of Pasture Land*

Throughout southern and eastern Africa the most serious problem of animal husbandry is overstocking, and the extent to which it exists, and some of the measures taken for checking it, are discussed in the chapter dealing with erosion.² In some parts of East Africa the situation may be more accurately described as an over-concentration of stock in areas which are free from fly and within reach of water, and it is held that the provision of new water supplies would to some extent enable stock to be more evenly distributed; this aspect of the problem is also discussed in another chapter.³ It will be sufficient here to give some examples of the measures taken in typical areas to improve grazing, and to improve stock by culling inferior animals, by preventing disease, and by breeding.

To prevent the exhaustion of the nutritive grasses and the injury done to the soil by constant trampling, it is necessary to introduce some system of rotational grazing by which fixed areas can be kept free of stock until the pasture has had time to recover, and sometimes also to plant rapidly-spreading grasses. The length of time required for recuperation varies, according to local conditions, from six months to eight months or a year, and success depends on the absolute prohibition of grazing during the resting period. In some native areas of the Union this has been enforced by fencing financed from the Soil Erosion Vote, and recovery of

¹ See Chap. IX, pp. 444 ff.

² See Chap. XVI, pp. 1066 ff.

³ See Chap. XV, pp. 1025 ff.

the natural grasses has been found to be very rapid.¹ In many areas, however, the difficulty of reserving reclaimed areas from grazing seriously limits the effect of measures for the control of erosion. In Southern Rhodesia the native reserves are being demarcated into arable and grazing areas. Over a million acres had been dealt with in this way by 1936. In some areas native authorities have co-operated in the necessary measures. Thus, in Basutoland the paramount chief has ordered that areas contoured to prevent erosion should be reserved from grazing. In the Sukuma District of Tanganyika dams have been built for the storage of rain-water in grasslands at a distance from the villages, and as many cattle as possible are sent to pasture there during the rainy season, thus resting the grass around the permanent sources of water near the villages. Over 14,000 acres of home grazing have been reserved by native authorities under this scheme. The Masai are also prepared to adopt the system, and the provision of watering places on this basis has been recommended. In the Kiambu District of Kenya individual natives have spontaneously made paddocks for grazing.

It has been pointed out that the value of improvements in stock is limited so long as the available nutrition is not sufficient to keep them in good condition; and 'the degree of improvement must always be dictated by the plane of nutrition'.² In many parts of Africa there is a severe shortage of food during the dry season, and in some areas the natural pasture has mineral deficiencies which cannot be made up except by hand feeding. In the case of the purely pastoral tribes their contempt for agriculture makes it difficult to persuade them to grow fodder crops. The most extensive pasture research work has been done in the Union of South Africa, and in Kenya, particularly in relation to the problems of European stock owners.³ In the Union research has reached a point where it is possible to recommend with a fair degree of certainty the type of pasture suited to different areas; woolly finger is one of the most important of the varieties indicated. In Kenya there are three grassland improvement stations, at Kabete,

¹ *Report on Native Affairs*, 1935-6, p. 44.

² F. Fraser Darling, *Animal Breeding in the British Empire*, 1934.

³ See above, pp. 945 ff., and p. 949.

Njoro, and Kitale, representing the three main types of climatic conditions; there are also stations at Ngong, Naivasha, and Fort Hall. Among indigenous grasses Kikuyu grass and Rhodes grass have been found useful. The latter can be used for the production of pasture and hay or on disused arable land, and is also drought resistant. In the latter respect the local indigenous star grass has been found superior to introduced varieties. The indigenous clover is expected to prove useful in mixture with Rhodes grass as a pasture legume. In Tanganyika research is still being directed to the determination of pasture species that can be successfully used in rotation.

(b) *Culling*

The compulsory culling of inferior stock has frequently been recommended, but has not so far been imposed owing to the strong dissatisfaction which it would inevitably arouse.¹ The one exception is the Glen Grey District in South Africa, where a proclamation is in force under which poor cattle are branded by the authorities, and must then be disposed of within six months. In the Transkeian Territories General Council proposals to introduce such a measure met with strong opposition. The need for culling has been particularly urged by the Kenya Land Commission of 1933, which recommended the adoption of a definite ratio between land areas and numbers of stock, which should be consistently adhered to.² A Crop Production and Live Stock Ordinance enacted in 1926 made possible the compulsory limitation of live stock in any area, but it was never put into force. A considerable development in marketing facilities has taken place since the Commission issued its report, and some observers believe that the remedy lies in this direction rather than in a compulsory measure of culling. It has been pointed out that a policy of culling of weakened stock can have little effect on quality where, although all animals are stunted, the struggle for existence is so severe that only the hardiest survive. For Swaziland a tax on cattle owned in excess of a fixed number was recommended by Sir Alan Pim.³

¹ For example, destocking measures in the Ukamba reserve have resulted in considerable unrest. See *Manchester Guardian*, August 12, 1938.

² See Chap. XVI, p. 1098, and also *Report of the Kenya Agricultural Commission*, 1929, paras. 126 ff.

³ *Report*, op. cit., Cmd. 4114, 1932, p. 105.

(c) Dipping and Fencing

The most important measures to prevent the spread of disease are dipping and fencing. In the Union of South Africa, dipping is now general among European farmers; it was first introduced in the Transkei during the serious outbreak of East Coast fever in 1900, and by 1932 nearly £1,000,000 had been spent on tank construction and dipping operations. In Southern Rhodesia dipping is compulsory in the wet season. In Northern Rhodesia and Kenya legislation provides that dipping may be made compulsory in areas where the local inhabitants request it. In Northern Rhodesia this has not so far been done, but in Kenya farmers' associations in the Thompson's Falls District in 1936 petitioned for the application of the Cattle Cleansing Ordinance to that area. In Northern Rhodesia a dipping scheme for native areas was introduced in 1930, but abandoned as an economy measure in 1932; there are, however, fifteen dipping tanks in native reserves. In Tanganyika a number of dipping tanks are maintained at their own expense by European farmers, but the opinion has been expressed that in native areas expensive measures for the control of East Coast fever are hardly justified in view of the excessive numbers of stock.¹

In the Union, very considerable progress has, as noted elsewhere,² been made in the paddocking of the lands of European farmers. In the Transkeian Territories the General Council contributes on a £ for £ basis to the cost of fencing schemes undertaken by ten or more contiguous farmers; but individuals who wish to erect fences have to meet the whole cost themselves. Kenya has an ordinance³ which makes fencing compulsory where it is applied, but in view of the great expense which this would impose on farmers it has not been brought into force in any area.

(d) Stock-breeding

Improvements in the quality of native stock can be achieved either by the selective breeding of indigenous strains, or by their admixture with imported stock. In South Africa there seems as

¹ *Annual Report of the Department of Veterinary Science and Animal Husbandry, 1936*, pp. 9-10.

² See Chap. XVI, pp. 1080-1.

³ No. 31 of 1929.

yet to have been no definite decision of policy in this matter. The Afrikander strain has many qualities, among them that of resistance to drought or scarcity conditions; but over a large part of South Africa it has already ceased to be a pure strain. There are considerable differences of opinion as to the extent to which the Afrikander stock, as it exists to-day, is capable of further improvement by selective breeding, or how far a definite admixture of imported strain would be an advantage. Some authorities have expressed the opinion that if more than 50 per cent. of European blood is introduced into native stock there will be a retrogression, due to inability to adapt to difficult environmental conditions. In Southern Rhodesia, however, seven-eighths pure-bred cattle are said to have done well.¹

In the Union, the administration adopted in 1932 the so-called bull and ram camp schemes under which the service of improved sires is provided free for the herds and flocks of native owners. These schemes are in operation in native areas other than the Transkei. In 1936 there were 24 bull camps with 101 bulls, which served about 500 cows, and 3 ram camps with 45 rams. Bulls and rams are purchased for sale to native owners. Bulls are also loaned to farmers who are too far away to bring their cows to the camps. In the Transkei the Tsolo School of Agriculture has concentrated on the breeding of rams for sale to native farmers. The Afrikander breed of cattle is here regarded as the most satisfactory owing to its resistance to disease and ability to forage under stiff conditions.

Sir Alan Pim's reports on the High Commission Territories comment on the nondescript type of native cattle which has developed there owing to indiscriminate mixing with imported types. In Swaziland the government is introducing Dairy Shorthorn blood, and it was suggested in 1932 that if a sufficient improvement in breed was attained there would be a ready demand from European farmers for bullocks in store condition. In Basutoland the introduction of Afrikander cattle was recommended by Sir Alan Pim. The importation of rams other than merinos was forbidden by proclamation in 1927, and a castration campaign against undesirable animals inaugurated at the same time. In Bechuanaland it was held that the effort required to carry out a wholesale

¹ E. B. Worthington, *op. cit.*, chap. xiv.

castration of inferior bulls would be unjustified unless a sufficient supply of fresh blood was available. A grant for the establishment of bull camps was, however, made in 1935.

In the tropical areas there appears to be less hope, except in the highlands, of improvement of stock by the introduction of European breeds, and more attention has accordingly been given to selective breeding of native cattle. The castration of inferior bulls is carried out as widely as possible, but in most native tribes this is still rarely practised except under the direct influence of Veterinary Departments. In Nyasaland it is done by native assistants at the dipping tanks, a method which makes it difficult to combine it with advice on the principles of selection, but it is proposed to establish castration centres under the supervision of veterinary officers. In most territories no clear policy is adopted with regard to the qualities at which breeding is to aim. In Tanganyika native stock has been graded up by crossing with Friesian and Ayrshire cows; the half-grade animals yield more milk and are more tractable. Three-quarter breeds are larger and mature more rapidly, but require correspondingly more food. In Kenya the native herds used at the veterinary training centres are bred up for demonstration to farmers in the neighbourhood.

In Uganda three stock-breeding farms are maintained by the Veterinary Department and two by the native administrations. Only local stock is used and special attention is paid to milking capacity and to the production of draught animals.

In Nigeria experiments are in progress at Shika, near Zaria, for the improvement of three types of native zebu, the white Fulani, Godali, and Shuwa, in order to evolve 'dual purpose' cattle, namely, milking cows and working bullocks for the mixed farming areas. At a stock farm established at Ilorin in 1936, with the assistance of a grant from the Colonial Development Fund, work is in progress on the breeding of a West African shorthorn type suitable for the forest belt; resistance to trypanosomiasis and utility for mixed farming are the main desiderata. Cattle are to be introduced from the Gambia, Gold Coast, and Dahomey, and it is hoped to obtain a small Malinke herd from French Guinea, since this is reported to be superior to any other West African type both in conformation and resistance to disease.

Surplus stock are sold to mixed farmers and are in great demand.

In the Gold Coast Northern Territories the government livestock farm at Pong-Tamale has made similar experiments in selection for resistance to trypanosomiasis. N'Dama cattle from French Guinea have been found resistant to the various strains. Increased beef production is also sought. Improved bulls are issued from Pong-Tamale to ten native administration farms and distributed thence to small farms and village herds. Here the advantages of foreign introductions are questioned by Sir Frank Stockdale, who regards selection from indigenous breeds as preferable.¹

In French West Africa more attention has been given to the breeding of sheep than of cattle. In the wool-producing districts half-bred merino rams are distributed free to native breeders from whose herds ewes have been selected for crossing. The Diré Company has found on its farm at Goundam that half-breed merinos are more resistant to disease than animals with a larger proportion of merino blood. Grading up of native breeds of cattle, horses, and sheep is carried out at the government farm at El Oualadji in the Sudan.

In the Belgian Congo the government farm at Nioka in Ituri is breeding cattle suitable for both milking and beef. Angola cattle have been imported for many years and crossed with European types, but the resultant animals have not the stamina of native types, and attention has more recently been directed to the selective breeding of native stock. In Coquilhatville Province native cattle have been introduced from Dahomey and Conakry.

(e) Training of Africans in Animal Husbandry

Apart from the mixed farming schemes which have been described² there is little provision for special training of Africans in animal husbandry, either as private farmers or as subordinate African staff. In the Union of South Africa practical and theoretical training in animal husbandry is given to young native men at the Fort Cox Agricultural School. In Northern Rhodesia some instruction is given in animal husbandry at the Jeanes and other schools, and in the Barotse Province, where cattle are the main

¹ *Report*, op. cit., C.A.C. 270, 1936, pp. 77-8.

² See also O. T. Faulkner and J. R. Mackie, op. cit., pp. 64 ff.

source of native wealth, it is proposed to incorporate veterinary subjects in school syllabuses.

In Tanganyika a special training course for veterinary assistants already in the employment of the department was instituted in 1936. Small demonstration farms have been established in various parts of the territory, in some cases in connexion with native administration schools. Their principal purpose is to demonstrate methods by which live-stock can be kept without damage to soil fertility. Kenya has five veterinary training centres which give instruction in breeding, disease control, dairying, and the preparation of hides and skins. In Uganda the demonstration farms provide knowledge of improved animal husbandry, and a veterinary school attached to the research laboratory at Entebbe gives a three years' training for native veterinary assistants who have had a preliminary two years at Makerere.¹ Students taking the agricultural courses at Makerere attend lectures and demonstrations on veterinary subjects, and a course of a month for schoolmasters is held annually at Koja Stock Farm.

VIII. SOME FURTHER CONCLUSIONS

It has already been stated that in some areas there is a noticeable neglect of food crops and a concentration on the cultivation of cash crops. To what extent the number of those who no longer grow their food is increasing is not clear, but it is obvious that not only in some areas where considerable incomes can be made from cash crops, but also in territories where peasant producers are rare, large numbers of Africans are becoming permanently detached from food production and dependent on money earned from their labour or from the sale of produce. In times of economic stress they would find themselves destitute or dependent on such food as food growers can share. Reference has been made to the use which it has been necessary to make both in British and Belgian territories of regulations which require natives to grow a minimum of subsistence crops as a protection against scarcity.² These provisions apply, however, to abnormal circumstances. The possibility of increasing detachment from agricultural work and the fact that large numbers of agriculturists are absent from their

¹ See Chap. XVIII, p. 1248.

² See Chap. XI, pp. 630 ff.

villages for long periods in many areas emphasize the need in normal circumstances for encouraging an expansion in the area and in the methods of cultivating food crops.

The general problems arising out of the contact of the simple system of native economy with European influences and modern conditions are discussed in a later chapter,¹ but it may here be remarked that agriculture, in the Union as well as in other territories, remains the predominating occupation of Africans,² and in spite of a gradual increase of the division of labour and of the exchange of products,³ industrial work and wage earning remain a less important part of the whole. How far industrial employ is likely in the future to draw large numbers of workers from agriculture depends on factors over which administrative policy has in actual practice little direct influence. The Union will no doubt continue to stimulate and expand its secondary industries; but for many years to come the African colonial dependencies of Great Britain, France, and Belgium are unlikely to give active encouragement to industries of a type which will compete with their home manufactures. For the present and the near future at all events industry will be chiefly represented by mining, and this has received in the past, and will probably receive in the future, little direct stimulus from government policy. As suggested when discussing the problems of labour,⁴ the question whether preference should be given to a policy of industrial or of agricultural development is one which seldom arises in a direct form, nor can it profitably be considered as a matter of general principle. If the issue arises at all, it usually takes the form of a question whether a particular area should, in view of its health conditions or population statistics, be closed to recruiting,⁵ or should by reason of treaty obligations be protected from prospecting,⁶ or should be reserved from European exploitation in the general interest of the preservation of African social conditions.⁷ In such cases the decision is based on the need for protecting certain concrete interests of Africans, rather than on any consideration of the economic or social value to be attached respectively to industry or agriculture.

¹ See Chap. XX, p. 1414.

² *Ibid.*, pp. 1405 ff.

³ *Ibid.*, p. 1414.

⁴ See Chap. XI, p. 706.

⁵ *Ibid.*, pp. 651 ff.

⁶ See Chap. XXII, pp. 1510 ff.

⁷ See Chap. XII, p. 767.

The factors which an administration has to weigh lie, as will have been seen, in the social rather than the economic field, and the practical issue which it has to deliberate is whether or not it should place restrictions on the operation of any particular type of enterprise. Admitting the gravity of the disturbance to many sides of African social life which can be caused by the expansion of industrial employ,¹ even those administrations which are most sincerely concerned to safeguard the interests of African society during its period of adjustment to new conditions, must nevertheless accommodate their policy to the fact that, if the African has to depend only on the results of his agriculture, poverty and malnutrition are, in some parts at all events, likely to continue to hinder him in making any material advance in the standards of life.

There is another issue, of a less general nature, which has taken a prominent place in discussions on agricultural policy, namely, that which relates to the relative merits of development by peasant agency, or by the 'plantation' system.² This term is mostly confined to those undertakings which involve the large-scale employment of non-native capital and management. There will be found in Chapter XX a discussion of the economic factors which apply to this issue, one of the oldest and most widely debated questions of colonial policy; if the subject is further mentioned here, it is mainly in order to point to certain circumstances which must largely limit the range within which an African administration can exercise a choice of policy. In the first place, the issue can hardly be said to arise in such territories as South Africa or Southern Rhodesia; there capitalists have the opportunity of proving, within the non-native area, the extent to which any type of crop can best be produced by the application of 'plantation' methods of cultivation and management. In the second place, there are certain widely-grown products, such as cotton or ground-nuts, which admittedly offer inadequate remuneration for capitalist management, save perhaps in such circumstances as those of the Gezira or Diré;³ and it is probable that cacao must be added

¹ See Chap. XI, *passim*.

² For a description of these systems as applied elsewhere, see H. M. Leake, *Studies in Tropical Land Tenure*, 1933, and H. A. Wyndham, *The Atlantic and Slavery*, 1935, pp. 108 ff. See also S. H. Frankel, *op. cit.*, 1938, chap. iv.

³ See Chap. XV, pp. 1050 and 1053.

to this class. There are, on the other hand, certain crops, such as sisal, tea, or sugar, which can in present conditions be profitably grown only by capitalist methods; this is also true of the raising of quality cattle either for dairying or the beef market. There is a further range of crops, which were at one time thought to be best suited for 'plantation' production, but are now known to be capable of successful production by peasants, provided that cultivation is adequately organized and marketing controlled by state agencies or adequately supervised co-operative institutions; the most typical example of this class is *arabica* coffee. It is a debatable point whether the oil palm is to be considered as best handled under the peasant system or not; indeed, it has been mainly on the oil palm that such controversy as exists on the subject has centred. There are those who maintain that Nigeria would have a more assured position as a producer of palm oil if she possessed a number of plantations similar to those of the *Huileries* in the Belgian Congo;¹ and they point to the increasing share in the world's market now taken by the Netherlands East Indies, owing to the quality of their product. German policy attached value to a system of large plantations as a means to the rapid development of sisal and coffee in Tanganyika, and rubber and bananas in the Cameroons. French policy, which in Equatorial Africa at all events, originally favoured development through large-scale concessions of land and local monopolies over produce, has of late years tended to the grant of concessions to colonists who will make relatively small plantations of bananas, cacao, or rubber; it looks partly to the increase of production, but partly also to their exercising a useful influence on native systems of cultivation.² The Belgian Congo still has some of the large concessions which remain over from the Free State régime,³ and has in late years given the *Huileries* concession for oil palm to which reference has been made above, but is now increasingly inclined to the policy of peasant production. As has been made clear in the course of this chapter, and in that dealing with the problem of land, Great Britain has, apart from the areas which have been colonized, consistently preferred a policy of development through peasant agency.

¹ See above, p. 920, and Chap. XII, p. 793.

² See Chap. XII, p. 787.

³ See Chap. XII, pp. 790-5.

There is, it is obvious, a relatively small field in which the merits of the two systems can come under effective discussion, and in practice the issue seldom calls for decision by an administration unless it is proposed to alienate lands to non-natives for 'plantation' purposes. The field is further restricted by the fact that, in some of the areas in which European capital has sought land for this purpose, as, for example, in Southern Nigeria, it would have been difficult to secure it without some considerable measure of expropriation.¹ The faith of those who at the time considered the balance of advantage to lie with a peasant system was expressed by Sir Hugh Clifford in an address to the Legislative Council of Nigeria in 1920:²

'Agricultural interests in tropical countries which are mainly, or exclusively, in the hands of the native peasantry (*a*) have a firmer root than similar enterprises when owned and managed by Europeans, because they are natural growths, not artificial creations, and are self-supporting, as regards labour, while European plantations can only be maintained by some system of organized immigration or by some form of compulsory labour; (*b*) are incomparably the cheapest instruments for the production of agricultural produce on a larger scale than has yet been devised; and (*c*) are capable of a rapidity of expansion and a progressive increase of output that beggar every record of the past, and are altogether unparalleled in all the long history of European agricultural enterprises in the Tropics.'

It would perhaps be agreed to-day that this statement over-emphasizes the case for the peasant system. The system offers, no doubt, the advantage of the cheapest form of labour, namely that of the family; it is elastic in so far that the native farmer can readily change from one crop to another in accordance with the returns obtained, and in the last resort can revert to food-crop cultivation. Again, the use of co-operative societies and *sociétés de prévoyance*,³ organized instruction, controlled marketing, and grading of produce have removed some part at least of the grounds for the objection that a regular supply of produce of standard quality cannot be expected from independent native growers. But it remains the fact, that in a competitive market, in which

¹ See Chap. XII, p. 770.

² See also Sir H. Duff, 'Cotton-growing in Nigeria', *Empire Cotton-growing Committee*, 1911.

³ See Chap. XXI, pp. 1477 ff.

quality and regularity of supply are of paramount importance, the advantage still seems to rest, in regard to the limited range of crops above mentioned, with the use of capitalist methods. Were it at any time proposed to apply that system on so large a scale as to take up extensive areas of land now occupied by natives, and to convert into wage labourers a considerable section of the present cultivators, British administrations at all events would feel strong objections on political and social grounds, nor would such a procedure be in full accord with the modern tendency of French and Belgian policy. But it is not possible to overlook the advantage which African territories have derived in the past, and can still derive, from the entry into their agricultural economy of a certain element of non-native enterprise. It is noteworthy that Tanganyika, in closing some of its areas to European exploitation, has made a reservation in favour of enterprises which can introduce certain definite advantages in the way of provision of water or the like, and that the Commission on Closer Union in East Africa, while persuaded of the need for providing the fullest safeguards for the native rights in land, nevertheless emphasized the value of the lessons which European systems of cultivation and management had conveyed to natives.¹ In the attitude taken by the Nigerian Government in 1920 there was, no doubt, some apprehension regarding the influence which European capitalist interests might be able to exercise in the affairs of the protectorate. To-day African governments have a more assured position of authority than then, and capitalists have had the experience of the depression period. A scheme for the establishment of 'plantations' on a scale which would assist the economy of an African territory without unduly invading native rights, could now be considered with better understanding on both sides.

¹ *Report*, Cmd. 3234, 1929, p. 20.

CHAPTER XIV

FORESTS

I. THE GENERAL POSITION

THE importance which attaches in Africa to a forestry régime does not lie only in the extent to which timber can be exploited for export or home consumption. There are, it is true, some territories, and more particularly those situated on the West Coast, in which the forests represent a valuable commercial asset. But there are many others in which they have very little commercial value, and their importance lies in the direct protection which they afford to the water-supply or their influence on climatic conditions, both of vital importance to the methods of livelihood of the African communities. Occasion has been taken in the course of a subsequent chapter¹ to refer to some of the scientific aspects of the function which is performed by a permanent or semi-permanent vegetal covering in preventing erosion or soil deterioration, and it is not necessary to deal again here with the matters there discussed. But throughout the world a growing attention is being paid to problems connected with the maintenance of soil fertility, and these questions have a special significance in areas where, as in a large part of Africa, production is already handicapped by deficiencies in the constitution of the soil.² These facts give to the activity of the state forest departments in Africa an importance, as agencies of general welfare, which was not fully appreciated a generation ago. In most territories it is now recognized that the justification for instituting a forest service is not to be found in its ability to pay its own way; the indirect value of forest management to the community is of greater importance than its direct contribution to the general revenues.

It is generally agreed that the greater part of Central Africa was at one time covered by high forest; the surviving forest belt of Central Africa now occupies only about 8 per cent. of the continent's area and has been described as a 'relic of itself'.³ The evi-

¹ Chap. XVI, pp. 1057-63.

² Chap. XIII, pp. 880, 962-4.

³ L. Lavauden, 'The Equatorial Forest of Africa', *Journal of Royal African Society*, Supplement, vol. xxxvi, no. 143, 1937, p. 7.

dence of Roman explorers suggests that it once stretched almost as far north as Khartoum, over 1,500 miles from its present borders. The more obvious cause of progressive deforestation has been native methods of cultivation,¹ which involve the cutting down and burning of high forest, but it remains a matter of conjecture whether other causes have not also operated; it has been suggested that the action of man may not suffice to explain the rapidity of the diminution of the equatorial forest in recent centuries.²

The tropical evergreen forests of Africa are the only ones at present capable of an important export trade in timber to Europe. Those of the Congo, the Ivory Coast, the Cameroons, Nigeria, and the Gold Coast are the most important; those of Kenya and Uganda are smaller in extent. Although luxuriant in vegetation, they are rarely well stocked in the mahoganies, irokos, obeches, and other high-quality or luxury furniture woods which are felled in them. Only the best trees, which have taken hundreds of years to grow, and which would take an equal time to replace, are acceptable on the European market. So far, exploitation has much exceeded replacement; and although progress is being made in the sylviculture of the mahoganies and similar valuable species, it cannot be said of the tropical evergreen forests that their management is understood or practised to any important extent. The work of producing high-grade and luxury timbers for the European market in future is one which, owing to great difficulties in technique, can only be carried out by trained European officers working in forest reserves directly managed by the state; not much can be done by Africans themselves.

In the rest of Africa the prevailing type of woodland is that known as savannah. This extensive area of hardy trees, of indifferently shaped and often swept annually by grass fires, has two important functions. It is now realized that large areas ought to be maintained permanently under trees as protection forest, particularly on hill-sides, catchments, and watersheds. Most savannah soils are of low fertility, easily exhausted and easily eroded if their cover is removed; they are perhaps more a source of danger if abused than a source of direct revenue if well cared for. Once forests of the savannah type have been declared closed to culti-

¹ See Chap. XIII, pp. 879, 885.

² L. Lavauden, *ibid.*

vation as protection forests, their chief need is safeguarding from fire. Methods are being successfully evolved, in some territories, of 'early firing', in which fierce grass fires of the dry seasons are anticipated by a deliberate burning earlier in the year. This is work which the Africans themselves are capable of appreciating and can be taught to practise. The other function of savannah forest has perhaps been less appreciated; it is a basis for native shifting cultivation, quite apart from being the source of all the forest produce upon which the African's existence so largely depends.¹ It may be long before agricultural research will discover means of avoiding the long period of tree fallow which so much of Africa requires between short spells of agricultural cropping, and until this is done it is not easy to see in what manner the savannah can be protected from the invasion due to the practice of shifting cultivation. But it is important to realize that where the practice follows its traditional course, and allows an adequate time for regeneration between periods of burning or cutting, it may be said that the injury done to the savannah is not serious; mischief arises, as has been pointed out elsewhere,² when the 'rest' periods are curtailed, under the influence of causes which are largely connected with the introduction of modern economic conditions. Though, therefore, shifting cultivation has undoubtedly done much to reduce the high forest belt, and has caused the substitution of degraded growths for the original timber, it is possible to exaggerate the harm it may have done in the past, or is now capable of doing, to the savannah growth.³ Certainly no observer can fail to be struck by the enormous areas of savannah still remaining in the Belgian Congo, Tanganyika, Northern Rhodesia, or Nyasaland. The repeated shifting of gardens, while giving the appearance of extensive destruction, generally allows the woodlands more chance of recovery than prolonged cultivation.

It is, of course, a fact that the commercial forests are those of the best quality. Most governments have already begun to make demarcated forests of their best timber areas, to put them under legal protection, and exercise control over their working. Latterly

¹ See Chap. XIII, p. 883.

² See Chap. XVI, p. 1088.

³ C. G. Trapnell and J. N. Clothier, *The Soils, Vegetation and Agricultural Systems of North Western Rhodesia: Report of the Ecological Survey, 1937*, para. 199.

many administrations have tended to place as much importance upon the local marketing of secondary timber species from these forests as upon the export of the most valuable species to Europe. Less advance has been made with protection forests, partly because these are less directly remunerative, and partly also because they cannot be maintained until African public opinion has been educated to appreciate their value. Speaking generally, forestry work in Africa may not unjustly be described as being in its initial stages. In many areas it is still necessary to decide how much of the existing forest needs to be maintained for watershed conservation and the prevention of erosion, for the maintenance of farming operations, particularly in connexion with native subsistence agriculture, for village and town fuel-supplies, and lastly for the growth of timber for use in local industries or for export. Occasion will be taken to discuss at a later stage in this chapter the factors with which an administration must deal in arriving at a decision on these points.

II. FORESTRY WORK IN THE VARIOUS TERRITORIES

(a) *Union of South Africa*

The indigenous timber forests of the Union are estimated to occupy only 778,000 acres, and are confined to the region of constant rainfall in the south and to the seaward slopes and deep kloofs of the southern and eastern escarpments. The need for afforestation has been felt from the earliest period of settlement. In 1690 the Governor of the Cape of Good Hope ordered that 100 young oaks should be planted by every agriculturist. To the early Dutch settlers South Africa also owes the introduction of the stone pine, cluster pine, and a species of poplar; the last proved useful during the War for the match factories of the Union. The modern policy of afforestation dates from 1876, when a grant of £25 was made from public funds 'as a tentative measure towards the renewal of Crown forests under the direction of conservators'.¹ In 1884 the Conservator of Forests at Kingwilliamstown required his foresters to maintain small gardens for raising plants, and three years later the system whereby trees are planted among crops,

¹ *Division of Forestry, Annual Report, U.G. 53, 1937, p. 5.*

known in Burma as *taungya*,¹ was introduced. Burnt forest land was given out to cultivators to clean and plant with mealies or beans, wattle seeds being sown between the rows. This attempt led to more abuse than success. Meanwhile some pine plantations were formed at Knysna. From these unpretentious beginnings plantation work has so far advanced that the state to-day owns 324,535 acres of plantations. It has reclaimed upwards of 28,000 acres of drift sand, much of which is now under trees. Public bodies and private individuals now maintain large plantations of wattle and other trees; that they are still developing their schemes of afforestation is indicated by the fact that 4,000,000 plants were sold from the state forest nurseries in 1937.

The periodic recurrence of drought conditions in the Union,² and the attention which has been directed to the problems of water and soil conservation by recommendations such as those of the Drought Commission of 1923,³ have given public importance to the plantation policy, to which the activity of the forest service is now largely directed. The provincial forestry departments were amalgamated at the time of the Union, and in 1934 the Forest Department was combined with the Department of Agriculture. A Division of Forestry is presided over by a technical officer termed the Director of Forestry. Forests are controlled by a Forest Act,⁴ in the terms of which forest reserves consist of both demarcated and undemarcated reserves, and power is conferred on government to expropriate land for forestal purposes. The Act also deals with the protection of private forests and affords protection to owners who desire it.

The area of Crown lands reserved for forestal purposes amounted in 1936 to 3,173,775 acres, 2,702,460 of which were demarcated forest reserves. 450,000 acres of this total area were indigenous high forest, 309,000 acres afforested land, and 361,000 acres land suitable for afforestation. The remaining 2,054,000 acres were scrub forest and land held for protective purposes. These figures do not include game reserves or the 'national park'. The policy of the Forest Division is, first, the protection of indigenous forests

¹ See G. V. Jacks and R. O. Whyte, *Erosion and Soil Conservation*, Imperial Bureau of Soil Science, Technical Communication No. 36, 1938, p. 34.

² See Chap. XV, p. 1026.

³ See Chap. XVI, p. 1080.

⁴ No. 16 of 1913, amended by 14 of 1917.

so as to increase their future productivity, the revenue derived from these being spent on conservation and regeneration; and secondly to increase the production of timber by plantations of exotic trees. Numerous species, yielding the ordinary softwoods or durable softwoods of the cedar and cypress classes, or durable hardwoods such as eucalyptus, are employed for this purpose. It is estimated that, allowing for afforestation undertaken by public bodies and private persons, the state requires to afforest an average of 20,000 acres of land per annum, but it is doubtful whether sufficient suitable land can be made available. For this and other reasons the annual rate of planting has been stabilized at 16,000 acres per annum. In 1936 the new plantations amounted to about 15,466 acres. Special attention is given to catchment areas, and in pursuance of a resolution in regard to protection of catchments and prevention of veld fires, adopted by the Union Parliament in 1935, suitable land is to be brought for these purposes under the control of the Forest Act, and funds were allocated for work in connexion with the protection of watersheds. The Native Trust and Land Act, 1936,¹ provides that all forests on Crown land in native areas not already demarcated under the Forest Act are vested in the Native Trust. It is also the policy of the Forestry Division to induce farmers and others to plant trees for the purpose of shelter, fuel, and other local uses. The most extensive private plantations, however, are those of black wattle for the production of tan-bark, which amount to 119,606 acres.

The total expenditure of the Forestry Division amounted in 1936-7 to £522,754, and the revenue derived from government areas to £155,589. The European staff consists of 70 officers, including research workers, and 200 European foresters. The higher branches are recruited from students who have completed a four year course in forestry at Stellenbosch University. The Paradys Forest School, situated in a forest reserve near George, provides a two years' course for foresters. Numbers of natives are employed by the department, but no provision appears to be made for special training for them. Considerable research work is carried out at the Forest Products Institute at Pretoria, in the field, and at the Knysna Research Station. Knowledge is accumulating as to the pro-

¹ See Chap. XII, p. 722.

perties and uses of locally grown exotic and indigenous timbers, and the investigation which is being made in regard to the influence of environment and sylvicultural treatment on the strength of timbers produced in the plantations promises to yield results of importance.

(b) *The High Commission Territories*

Basutoland is characterized by the almost entire absence of indigenous trees, and with the exception of sporadic efforts to plant poplars, the inhabitants have done little or no tree planting in the past. At present animal manure is used for fuel, to the detriment of agriculture, and Administrative Officers are directing efforts towards the growing of trees for fuel-supply. The land tenure system does not, however, encourage individual tree growing. In 1936 11,481 trees were planted in connexion with anti-erosion works. Parts of the Bechuanaland Protectorate are relatively well wooded, and a large quantity of dead wood for fuel is exported by rail from the southern part of the territory to the Transvaal diamond diggings. In the Chobe area, adjacent to the Northern Rhodesia forests,¹ timber is felled under agreement with the government for use as railway sleepers, and in 1935 a forestry officer was appointed to supervise the concession, which extends over 150 square miles of forest. The typical timber tree in this area is Rhodesian teak (*Baikiaea plurijuga*); the average export of timber is some 50,000 hoppus feet per month. No afforestation schemes appear to exist. In Swaziland the low veld is heavily bushed and isolated forests exist in the Drakensburg Range. There are no indigenous timbers in sufficient quantities to repay exploitation, and there appear to be no schemes in operation for afforestation or conservation.

(c) *Southern Rhodesia*

In contrast with the Union, the territory is comparatively well wooded, being covered with trees and shrubs over about 60 per cent. of its area. Except, however, in isolated and favoured spots, trees of large dimensions are found only in the mountain forests and in woods bordering the rivers. The indigenous forests have played an important part in the development of the country, sup-

¹ See below, p. 993.

plying fuel, mine props and timber to the mines, and fuel to the villages and townships, and, until coal was discovered,¹ for the railways. In the early stages of occupation free cutting was permitted to miners and prospectors on unalienated land and in native reserves, but from time to time some measure of control was subsequently instituted. A nursery was started at Salisbury in 1903, and a forestry adviser was appointed in 1912; in 1922 the Mtao forest reserve of 13,137 acres was formed, but no general policy of protection or reafforestation was instituted until after responsible government was established in 1923. A policy of protecting the indigenous savannah forests on Crown lands in three administrative districts was instituted in 1925. In 1927 the Stapleford forest reserve of 60,305 acres was formed, where owing to the comparatively high rainfall (over 40 inches) softwoods, including pines, cypresses, and other conifers, can be grown, and in 1929 about 782,500 acres of tree veld in Matabeleland were taken over. The Mtao reserve, later increased to 15,498 acres, embraces a portion of Mashonaland occupied by Europeans, where hardwoods as well as some softwoods can be grown. By 1930 the area classified as state forest amounted to 4,379,924 acres, of which 666,404 acres were reserved forests, 192,000 unreserved forests, while the greater part, namely, 3,521,520 acres, consisted of national parks and game reserves. In the same year the area afforested with exotic trees amounted to 3,391 acres. In 1938 the Europeans employed on forestry work numbered 44. Trained foresters are drawn from the Union, Conservators are trained mostly at the School of Forestry at Edinburgh. There appears to be no specially trained African staff.

While attention is at present being directed to building up commercial forests for timber, an increased measure of conservation for watershed protection would appear to be actually more urgent, though difficulty is likely to be experienced from the fact that much of the land on watersheds is already in private hands.

(d) British Colonies and Protectorates

Before the War there existed no definite scheme for the training of officers for the forest services of the British African dependencies, although Forestry Schools existed at the Universities of Oxford,

¹ See Chap. XXII, pp. 1492, 1495.

Cambridge, and Edinburgh, nor was the local organization of forest work such as to make any material impression on the problems which had to be faced. A proposal to form a forest research institute in Great Britain was made at the Empire Forestry Conference held in London in 1920, and the opening of the Imperial Forestry Institute at Oxford followed in 1924. Candidates for the Colonial Forestry Service are required to possess either a degree of B.Sc. in Forestry or a Science degree and a diploma of Forestry; the centres at which degrees or diplomas of this class may be obtained are the Universities of Oxford, Edinburgh, Aberdeen, and the University College of Bangor. They must take a post-graduate course at the Imperial Forestry Institute, the final year of which is to be completed after a tour of service in Africa. The postponement of the completion of the course until practical experience has been gained of the actual circumstances of Africa is justified by the variety of the forest conditions encountered by recruits in the service of various territories.

The vast areas of thinly populated woodlands in Central Africa present a different problem of control and conservation from that of the more southern areas, where forest lands are less extensive and better defined. Except in the tropical evergreen forests, trees of special value are rarely found in considerable numbers, and their preservation presents considerable difficulties. They are often communal property, liable to be felled by any person desiring ant-proof timber for his hut, a canoe, or even wild honey or fruit, and little can be done for their preservation without the interest of the native authorities and the people themselves. Again, the frequent removal of gardens and villages discourages the introduction of methods such as *taungya*, or the individual planting of trees. Owing to the smallness of forestry staffs and the concentration on urgent problems in connexion with the cutting of timber for industries and for sale, little has been done towards forestry organization in the native areas and, as will be seen, only in Nyasaland has any extensive scheme of communal forests been put into operation. In all territories there appears to be a need for careful reconnaissance, on lines similar to those of the ecological survey carried out in Northern Rhodesia, as a basis for land and forest planning.¹

¹ See C. G. Trapnell and J. N. Clothier, *op. cit.*

The forestry problems of Northern Rhodesia are of an unusual character. At the present time there are three main divisions of forestry work, the *Baikiaea* or Rhodesian teak forests in the Zambesi valley, the forests in the area near the copper mines, and the reserves required for the provision of fuel for the principal towns. The exploitation of the *Baikiaea* forests was uncontrolled in its early stages. The concessionary company has now started on the last large area of profitable exploitation, and logging operations on any large scale may be expected to cease in not less than twenty years' time. Had the necessary knowledge and control been available at an earlier stage, the continuity of the forests could probably have been secured, but this is not now feasible, and it is estimated that a period of seventy years' conservation must elapse before the forest is again of commercial value. The present industry employs some 150 Europeans and 4,000 natives and its cessation will be a serious economic loss to the country. As regards timber required for the mines, about 500 square miles in the immediate neighbourhood of the copper mines is held by the mining companies, under tenures permitting timber to be cut on a particular grant for use within the area of the grant only. Besides importing some £80,000 worth of timber annually the mines use great quantities of indigenous timber, particularly for fuel; their total annual consumption is estimated at 320,000 cubic feet. Supplies of major timbers on mine land are scarce owing to uncontrolled and wasteful cutting. A reservation of some 1,200 square miles has been suggested, but in a temporary undertaking given for 1935 it was made clear that any concession that may be granted may not cover the whole of the area. The method of exploitation without regard to regeneration hitherto followed shows the necessity for proper working conditions, and the preliminary operations of reconnaissance, and the subsequent supervision of cutting and the like, will cause a considerable increase in the work of the forestry staff. The forests in the mining regions have a low yield of useful timber and present a large number of sylvicultural problems. Work has been concentrated for the present on problems of regeneration and a number of experiments have been carried out; planting trials include indigenous species and Mexican pitch pines. One private factory has devoted attention to the possibilities of the commercial

use of indigenous woods, but much further study is required.¹ So far as fuel supplies for the towns are concerned, the destruction of woodland for fuel is common in the vicinity of towns as well as mines; thus at Broken Hill every tree within an area of thirty square miles has been destroyed. Forest reserves are being laid out to preserve future fuel supplies. So far little has been done to preserve timber in catchment areas, and the single reserve for this purpose is of a nominal character.

The Forests Ordinance² allows for the control of forest lands and the protection of certain trees: the area gazetted as state reserves amounts to 575 square miles. The forestry staff in 1936 consisted of 3 European Conservators, 1 European forester, and 35 forest guards. No African foresters are employed or are in training. Little responsibility is assumed by the native authorities for forest protection. At present it would not appear that there is any urgent need for the control of the cutting of woodland for garden or other purposes, save in cases where the destruction of timber of potential economic value is involved. For this purpose, and also to decide what areas are required for the purpose of water conservation, a careful survey of the territory is required.³

Nyasaland is comparatively well wooded, the forests occupying 11·8 per cent. of its area, but, as in other territories where shifting cultivation is practised, there has been much degradation of the original woodlands. The forest reserves now number 48, with an approximate total area of 2,623 square miles, which is equivalent to 7 per cent. of the land area of the protectorate. The reserves cover the major catchment areas and watersheds. Protection of stream banks and hill slopes is provided for by legislation,⁴ but further control appears to be necessary to ensure the preservation of natural vegetation on the poorer soils of the country. Moreover, in opening up land for agriculture it seems advisable under local conditions to preserve sufficient belts of forest and natural vegetation to form wind breaks for the conservation of soil moisture and the prevention of wind erosion. Since 1926 a scheme for the formation of village forests by allocating an area near villages to be

¹ *Report on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, p. 249.

² No. 21 of 1925.

³ See C. G. Trapnell and J. N. Clothier, *op. cit.*, para. 200.

⁴ Forest (Amendment) Ordinance, 1936.

maintained under forest, has been in operation, with the primary object of providing supplies of firewood. The scheme aims at demarcating 2 acres of forest land for each family; seedlings are issued by the government, and the village headmen, assisted by African foresters, are held responsible for their care and upkeep. At first the scheme was not popular, but in 1930 a District Officer was seconded for six months to explain its advantages to the natives, and by 1936 well over 3,000 village forest areas had been demarcated.¹ The scheme follows in some respects the practice in parts of India and resembles the communal forests in France, such as in the Auvergne. Provision is also being made for the demarcation and protection of selected forests and woodlands by native authorities; they are intended to be supplementary to the state forests, but in no way to supersede the village forests for village needs. Their area is given as 250 square miles.

Forestry is controlled by Ordinance 12 of 1926, which is administered to a great extent by the native courts, and in 1935 about 88 per cent. of the 3,469 convictions under the Ordinance were dealt with by them. The forestry staff consisted in 1936 of 6 Europeans, 1 of whom is engaged in research, and 1 forester. The African staff comprised 33 foresters, who are trained in the field and in a special course at Limbe. There were also 82 African forest guards. Observations and experiments in silviculture are being made with regard to natural regeneration, also with species of exotics such as pines, which show promise since the inoculation of soils with mycorrhiza was begun. The value of exported timber in 1936 was £25,964 and of imported £24,392.

The original forests of Tanganyika Territory had been seriously reduced long before European occupation; climatic and soil conditions postulate the previous existence of areas of evergreen forest of which only small traces now remain. The area of state forest reserves, which amounts to 4,060 square miles, covers less than 1.5 per cent. of the total land area of the territory. There are 322 square miles of 'close' forest awaiting reservation. In addition to 107 square miles of native communal forests there are 172 square miles of non-native privately owned forests. These figures include nearly all the remnants of evergreen forest in mountain country

¹ *Nyasaland Forestry Department, Annual Report, 1936, para. 50.*

and round the head waters of rivers and streams. A few small experimental reserves and plantations, on the lines of the village forests in Nyasaland, have been formed under the native authorities to provide poles and fuel for villages where supplies are in danger of exhaustion, but it remains to be seen whether the native authorities will in fact be capable of controlling cutting so as to maintain a permanent supply. The *taungya* method has been used for replanting, and in Kwimba District, where the problem of wind erosion exists, strip plantations have been established in echelon formation as wind breaks. In the Forest Rules (8 of 1933) power is granted to Administrative Officers to prohibit the destruction of trees on the upper slopes of mountains and hills and on the banks of streams; Rule 6 provides against the clearing of private forests, but is difficult to enforce owing to lack of establishment. An increasing use is being made of native authorities to enact regulations to prevent the destruction of trees near the banks of streams and on the tops of hills.¹ Four areas in the forest reserves are being exploited by seventeen saw-mills, including those belonging to the gold-mining industry, and working plans have been prepared which prescribe regeneration by planting. One of these mills operates with a view to starting an export business.

Very large free issues of timber are made to the gold mines which hold extensive forest concessions. The exports of timber were valued at £15,000 in 1936 and imports at £22,000. The staff consists of 8 European Conservators, 9 European foresters, 1 African forest ranger, and 148 African forest guards. The African staff is to be trained in future in a Rangers' School at Aroscha opened in 1936. The establishment has proved inadequate to cope with the rapidly increasing demands; wastage of timber resources and leakage of forest revenue have resulted, and it has not been possible to introduce systematic forestry into several large areas of the territory, notably into the western and southern areas. In 1936 there were, indeed, no specialist officers such as silviculturists, and specialist work cannot be carried out by officers who are almost solely occupied with routine duties. The area is,

¹ E. Harrison, *Soil Erosion, Tanganyika Territory, 1937*, pp. 20-2; see also *Report to the League of Nations on Tanganyika Territory, 1937*, pp. 231-3.

moreover, one in which preservation of forestal growth is of unusual importance, owing to the length of the dry season. It may be noted that the recent grant of £57,570 from the Colonial Development Fund was intended for a joint scheme of forest preservation and water supply.

In Kenya rapid destruction of the high forests was going on when European occupation first began. Though reservation began in 1901, the process of deforestation continued actively until demarcation reached an advanced stage in 1911. The relics of the ever-green forest have been reserved as Crown forests, but shifting cultivation can be practised locally in the regenerated areas under licence, and excisions have been made from time to time; for instance, one excision of 13,500 acres was recommended by the Kenya Land Commission of 1933.¹ Excluding savannah, the remaining forest land only amounts to 2 per cent. of the total land area of the country, and it would appear desirable to avoid further excisions if possible. In the native reserved areas large tracts have been denuded of forest.² In the early days of the administration the forests which clothe the sides of Mount Kenya stretched, on the southern side, almost to the edge of the Masai plains. Elimination of Masai raiding by the British left the Kikuyu free to attack the trees, and until the demarcation of the forest in 1911, and to some extent afterwards, its edge was steadily pushed back. It has been estimated that the Kikuyu destroyed at least 1,000 square miles of forest before demarcation. Reafforestation is hindered by the difficulty of obtaining the consent of the natives themselves to the reservation of their lands for the purpose. A system of *taungya* has been adopted by the Department in the forest reserves, and in the Kiambu District the growing of introduced wattles³ is solving the question of fuel supplies. Exploitation is being undertaken by several saw-mill firms. The exports of timber were valued at £25,031 in 1936 and imports at £18,301, excluding box boards. The total area of forest reserves amounted in 1936 to 5,231 square miles, of which 371 square miles are on native lands. Certain outlying forests, particularly the large Masai forests, are still unprotected. Kenya has a gazetted staff of 9 officers, with 32

¹ Cmd. 4556, 1934, pp. 132-3.

² See Chap. XVI, p. 1096.

³ See below, p. 1014.

N.C.O. rangers and foresters, of whom 16 are European. The extension of conservation depends partly on the increase of staff, but much also remains to be done to educate native opinion, in order to secure a larger measure of assistance from the native councils.

In Uganda little is left of the original flora of the large forests which once covered the country, except in a few small areas such as parts of the Budongo forest, and on the high mountains. Deforestation of the more heavily covered areas, such as the slopes of Mounts Ruwenzori and Elgon, was already in progress when the country was first observed in 1896. This destruction of the old forests may be offset to a certain degree by the planting work now being carried out under the supervision of Administrative Officers, with funds from the native administrations, and by Forest Department staff, but it is by no means certain that the destruction of indigenous forest can be made good by replanting. In the lower areas the destruction of the savannah has been accelerated by the introduction of cotton cultivation,¹ and the denudation of the vegetation has produced in many districts a serious condition of erosion. In the Teso District alone it has been estimated that some 40,000 acres of savannah are cleared each year for cotton planting. The Forestry Department dates from 1917. In 1936 the staff consisted of 8 Conservators, 6 European foresters, and 42 African foresters or rangers; the African staff is trained at the Kiterera Forestry School. It is also proposed that an inter-territorial forestry school should be established as a branch of the Higher College which it is proposed to institute at Makerere. The native administration forestry headmen are given practical training at two forest stations; about ten of these have already been trained and work under the native administrations. For many years some native administrations have made small plantations for the supply of poles and fuel, and it is the policy of the Department of Forestry to build up an understanding among the Africans of the value of forests. It is also its policy to increase the reserved forest areas from the present area of 2,812 square miles to 10,000 square miles, including savannah forests, or 12·4 per cent. of the land area, and to exploit commercially the state forests. The exports of timber

¹ See Chap. XIII, p. 904, and Chap. XVI, pp. 1099-1101.

were valued at £14,145 in 1937 and the imports, mostly from Kenya, at £6,925.

In Nigeria, large areas of savannah forest cover the Northern Provinces and the northern parts of the Southern Provinces, and are subject to the usual shifting cultivation and annual firing. In the north the climate is dry and the proximity of the Sahara has raised problems of sand penetration. Here many cultivators may, owing to the prevalence of blown sand at sowing time, have to re-sow their seed three or four times, or even as much as ten times in bad years.¹ The theory of continuous southward encroachment of the Sahara is now, however, no longer universally accepted.² The areas of deforested farmland along the international boundary may give a wrong impression, but they are only an interruption of the savannah, which continues again farther north. But though it is not proved that aridity is progressively increasing, the irregular rainfall and lack of drainage produce oscillations and temporary extensions of the desert to the south, and it is necessary to devise means for protecting agriculture. Reservation of the savannah forest to form belts against the prevailing wind and blown sand, and above all the prevention of the annual firing of the countryside, have been suggested as practical measures which cost little, but they admittedly constitute interference with the practices of the people. Some experiments have been made with a process of strip plantations in echelon formation in the Emirate of Katsina. The work proved expensive, and difficulties were experienced in obtaining land from the native administration; this operation would also have been on far too small a scale to have had much effect on the problem of shifting sand. An experimental planting of Dom palm (*Hyphaene thebaica* Mart.) to form a barrier along the international frontier has met with some success.³ It may possibly prove to be more important to provide water supplies and plant good grasses in forest reserves in this district than to encourage tree growth.

¹ *Report of the Anglo-French Forestry Commission*, 1937, p. 4.

² E. P. Stebbing, 'The Encroaching Sahara: the Threat to the West African Colonies', *Geographical Journal*, vol. lxxxv, no. 6, 1935, p. 518, and 'The Threat of the Sahara', Extra Supplement, *Journal of the Royal African Society*, May 25, 1937; F. S. Collier and J. Dundas, 'The Arid Regions of Northern Nigeria and of French Niger Colony', *Empire Forestry Journal*, vol. xvi, no. 2, 1937, pp. 184-94. See also Chap. I, p. 14, and Chap. XVI, p. 1059.

³ See G. V. Jacks and R. O. Whyte, *op. cit.*, p. 119.

The more immediate results are appreciated by the inhabitants, who are accordingly readier to co-operate. Forest officers are now engaged in studying the desiccation question, and are making regional surveys in Northern Nigeria.

In the Southern Provinces of Nigeria the traditional system of cultivation differs from the more rapidly shifting system used elsewhere, but nevertheless involves much destruction of high forest. It was stated some years ago that cultivation on the northern and eastern borders of the high forest zone was resulting in a recession of forest at the estimated rate of 1,000 square miles a year. The matter is serious, for the destruction of the forest seems already to have had grave consequences on the cacao plantations of the western provinces. The introduction of *taungya* methods has been attempted, but it has not so far proved a marked success, as cultivators cannot be induced to do the planting, which has to be undertaken by the Department. Both the research silviculturists have been engaged in introducing this method, and examples are to be seen at Sapoba near Benin and at Mamu near Ibadan, but the view that reafforestation should by this means keep pace with destruction appears optimistic.

So far, most attention has been paid to the forests of the Southern Provinces, where the greater proportion of the staff has until recently been concentrated. Here the development of commercial timber production has to some extent overshadowed the important work of forest reservation, which has further been handicapped by the necessity for obtaining the consent of the native authorities, all land being here regarded as native property.¹ The total area reserved in Nigeria is 18,116 square miles;² until recently little had been done towards the reservation of areas of savannah forest. The aim is to attain a minimum reserved area of permanent forest of 25 per cent. of the total land area. This figure is based on proposals put forward some years ago, but, having regard to the increasing extent of erosion, there are some officers who consider that under present circumstances an even higher percentage is now desirable.

While in Northern Nigeria the government is not hampered

¹ For land system, see Chap. XII, pp. 768-74.

² Native Administrations, 11, 118, Government, 6, 998.

by the existence of rights which would make reservation legally difficult, in Southern Nigeria the general recognition that the lands are native property creates a different position. It was originally decided that forest lands could only be reserved by agreement with the native administrations; the agreement laid down the scale on which any royalties received should be distributed as between individual occupiers and the native treasury.¹ The slow progress made in achieving agreements led to the extension to the whole territory of the Forestry Ordinance of 1916,² which gave the government power to create a forest reserve, in the event of failure to reach agreement. Persons claiming rights over the land, and dissatisfied with the administrative award of compensation, can appeal to the courts. A certain number of reserves have been created in the Southern Provinces under this procedure. The reserves created under the ordinance are distinct from those created by native administrations under the Native Authority Rules. These are managed by the native administrations themselves with their own guards, and constitute a more popular method of reservation than that provided by the Ordinance, though the actual management is far less regular. Of recent years the administration has also decided to place selected state reserves under the management of native administrations, giving the latter a share in the net proceeds after paying costs of management. So far, the action has been taken only in the case of a reserve at Benin,³ measuring about 1,000 square miles.

A series of small communal reserves are being constituted for local supplies of fuel and timber, as in the Tiv Division, Benue Province. The burning of bush in the Northern Provinces, in connexion with tsetse-fly control, has occupied the attention of the Forest Department here as in other colonies; the fly may be exterminated, but the resulting deforestation may form the starting-point of new erosion. On the eastern slopes of the Udi plateau in the south-east erosion is being counter-attacked by the Forest Department on the lines of the reafforestation work carried on at Etawah, United Provinces, India, though on a much smaller scale.

¹ *The Forestry Manual*, 1924, p. 892.

² *Laws of Nigeria*, 1923, vol. iii, cap. 95.

³ See Chap. IX, p. 430.

In 1936 the forestry staff consisted of 51 European Conservators including 3 research officers, 1 European forester and 3 surveyors, and 41 African rangers or foresters. It is proposed to employ a few African candidates from Yaba College¹ and train them in a forestry school to be started at Ibadan.

In the Gold Coast the northern border of the high forest is receding, as in Nigeria and the Ivory Coast on the west, while within the forest belt farther south extensive areas (the total of which has been put as high as 1,000,000 acres) have been cleared for the cultivation of cacao;² other areas have been denuded to supply the mines, several of which possess concessions to cut timber. The area of high forest remaining to-day is less than 14,000 square miles; it is estimated that about 290 square miles are destroyed yearly, and that if the present rate of destruction is maintained, little will survive in fifty years' time. The securing of forest reserves is attained under the Forests Ordinance³ either by direct government reservation or by reservation under rules by the chief. The events leading up to the passing of this Ordinance form part of the political history of the territory.⁴ In 1911 a Forest Law was passed, providing for the establishment of government reserves, but was withdrawn on the opposition of the Aborigines Rights Protection Society, based on the ground that it was an invasion of 'stool' rights. After the War the chiefs were urged to establish 'stool' reserves through by-laws, but by 1926 only 240 square miles had been reserved, although 6,000 were considered necessary.⁵ In 1926, despite native opposition, a Forestry Bill was passed and became law; it provided that government should constitute reserves, but that they should continue to be the property of the stools. The policy has not been a success, for where reserves come within the jurisdiction of the native courts low penalties are given for infringements and the purpose of reservations is largely negated.

Owing to the former paucity of staff the Forest Department has concentrated on work in the south of the territory; only 2,436

¹ See Chap. XVIII, p. 1249.

² E. P. Stebbing, op. cit., p. 518; *The Forests of West Africa and the Sahara*, 1937, p. 46.

³ No. 13 of 1927.

⁴ See Chap. IX, pp. 465-70.

⁵ Sir F. G. Guggisberg, *The Gold Coast. A Review of the Events of 1920-6, and the Prospects for 1927-8*, 1927, p. 64.

square miles of reserves exist, but an attempt is now being made to extend this area to some 8,000 square miles, exclusive of savannah forest. The difficulty of obtaining this land is, however, obvious; if the object is achieved no more timber forest land will be available for extension of cultivation after twenty-five years. Proposals for reservation follow the lines of protection belts for West Africa suggested by Professor Stebbing.¹ Briefly, the plan is to enlarge existing reserves and establish new ones in such a way as to form a northern protective belt; to protect all the principal watersheds; to establish a belt of permanent forest on the hilly escarpment forming the north-east limit of the high forest region (which is also the region of cacao cultivation, and is the watershed between the Pra to the south and tributaries of the Volta to the north); and to form a series of shelter belts in the high forest (closed forest) region in order to protect the cacao cultivation, and small reserves near townships to supply local requirements. The cacao plantations need protection if they are to survive, and protection by forest belts, with the added safeguarding of the water supplies, appears to be a possible solution and as a beginning is not unduly costly. It has quite recently been decided to enforce the maintenance of shelter belts and so-called shade trees by the cultivators of cacao. The staff consists of 22 European Conservators, 64 African rangers and foresters, and 200 African forest guards. Exports of timber were valued at £119,795 and imports at £11,759.

Sierra Leone has practically lost its high forest belt. There are now only 765·25 square miles of reserved forest, representing 2·74 per cent. of the total land area. The unreserved primeval forest is being reduced every year, and the secondary forest which had replaced it is steadily deteriorating. In the south a rapidly increasing population has produced the usual result; the rotation of felling the savannah, now reduced to a mere scrub in parts, is as low as four years or even less. In the prevailing climate, soil, uncovered by forest, is reduced to sheet laterite, which has a poor value for cultivation purposes. In the Colony the forest reserves are on Crown lands, but in the Protectorate reserves may only be created if the chief and his council request the state to do so;² thus,

¹ E. P. Stebbing, *The Forests of West Africa and the Sahara*, 1937, pp. 37-47.

² For land system, see Chap. XII, pp. 780-2.

while in the Colony the reserved area amounts to 28·8 per cent., that in the Northern Province is 1·4 per cent., and in the Southern Province 3·6 per cent. of the total area. The forestry policy is to postpone the creation of new reserves under the Forestry Ordinance of 1924, in view of the smallness and remoteness of remaining areas of virgin forest and the high cost of reservation; the administrative staff is to exercise its influence with the chiefs to prevent unnecessary destruction. In order to reduce the cost of forestry, existing forests are to be improved for commercial exploitation, and in selecting areas for reafforestation, land which has passed out of cultivation is to be chosen. The activities of the Department are therefore largely directed towards the improvement of the stocking of accessible parts of existing reserves by natural regeneration. A forest nursery was established at Tabe (now being removed elsewhere) and *taungya* plantation work has been begun; some remarkable results have been obtained with *Gmelina* (an exotic from India) and *Cassia*. Experiments are also being undertaken at the Agricultural Research Station of Njala. The staff of the departments consists of 5 European Conservators, 4 African rangers or foresters, and a number of forest guards.

(e) *French Territories*

The French forest service in Africa was organized under a Decree of July 18, 1923, which envisaged a service similar to that of the mother country. Forest officers are recruited from the home service, or from candidates who have passed through the *École Nationale des Eaux et Forêts de Nancy*. A lower grade of *contrôleurs* was established by a Decree of the Governor-General of French West Africa in 1932. These are trained for two years at an agricultural college, and then for a period in France at the Forest School at Barre. Only in the Ivory Coast has a complete forestry service been established, but it cannot be said that the vast areas of forest in that territory have as yet been brought under complete control. In 1934 there were 5 Forestry Officers, 12 *contrôleurs*, and 35 African forest guards. It is noteworthy that the Forestry Officers are placed for administrative purposes under the control of the District Administrator.¹

¹ See Chap. VI, pp. 236-41.

The areas of reserved forests of all types are as follows:

French West Africa	.	.	.	1,400,000 hectares
Cameroons	.	.	.	200,000 „
Equatorial Africa	.	.	.	350,000 „

The forests of the Ivory Coast are probably in as favourable a position as in any other part of Africa.¹ There has been relatively little pressure of population on the soil, and it is only in late years that serious attention has been directed to the possibility of growing marketable crops, such as cacao and coffee. As a consequence the colony is still rich in commercial high forest, and the degradation of the savannah forest to the north of it does not appear to have proceeded so far as in the British colonies. It still contains a large percentage of scattered old trees, the relics of the former high forest. The exploitation of forests in the Ivory Coast dates from the early years of the century, and for some years created a serious labour problem. For some time 15,000 men were employed; communications and living conditions were bad, and recruits were only obtained under administrative pressure. Government reports spoke of grave social disorganization in the recruiting areas, and there was a high percentage of desertions from the forests. A reduction in the scale of exploitation, improvement in communications, and the activity of the state inspectorate have greatly reduced the scale of the labour problem. The forest service was created in 1925. The management of the forests is now regulated by government decree.² By 1930, 33 concessionaires exploited 33 areas of 2,500 hectares each, most of which belonged to five private companies. In 1930, 26,586 trees were felled, 12,000 of which were mahogany. The *Compagnie Forestière Équatoriale* lease concessions amounting to 100,000 hectares. There are 17 saw-mills working in the colony, 5 at the capital, Abidjan, of which 2 are government mills, and 1 in each of the more important districts, to supply local demands for converted material. The cost of exploitation is increased year by year by the need to cut at greater distances from the lines of communication. The period during which exploitation on the present lines is possible is estimated at seventy-five

¹ The Ivory Coast has 40,000 square miles of rain forest.

² Decree of June 18, 1912, *arrêté* of March 22, 1927.

years, and some remarkable efforts are now being directed towards regenerating the regions from which trees of value have been cut; there are some areas which have been completely denuded of mahogany and the more valuable species of timber.

The provisions of the Decree of 1912, which aim at the limitation of cultivation near villages to preserve woodlands, have not been enforced, possibly owing to difficulties of control. The importance of native co-operation in forestry work is recognized, and a circular issued by the Governor of the Ivory Coast in 1934 describes the afforestation work done by the native communities in the savannah areas. The north of the colony has been divided into three regions, with the object of forming village plantations, and the species to be employed were laid down for each region. The project is supervised by the Forestry Department and is said to have met with considerable success.

Forest reservation is still in progress, but no large-scale reservations in the savannah forest have yet been considered. Old trees of valuable species standing in the savannah regions are marked by the forest staff for reservation and used as seed-bearers, the seed required by the Department being collected by the villagers under the orders of the Administrative Officers. A scheme for forming plantations for the supply of fuel for the railway has been started in the savannah regions, teak, *Cassia*, and *Dalbergia sissoo* being amongst the exotics planted.

In Togo the Germans began a scheme of plantations in the savannah regions under which an area of 80,000 hectares was to be replanted. By 1914 about 3,000 hectares had been planted, but the results, even allowing for the want of supervision during the War years and the damage done by fire during that period, were on the whole disappointing, possibly owing to inexperience in tropical soils and species. The chief species planted were teak, the mahoganies (*Khaya senegalensis* and *grandifoliola*), and iroko (*Chlorophora excelsa*). It is interesting to note that the Germans made use of two methods, the 2 m. \times 2 m. planting, and the line method in which they cut lines 2 m. apart and 0.50 m. wide, cleaning the line and sowing seed. The French appear to have adopted these methods with modifications, and in the operations undertaken in the Ivory Coast, where the rain and deciduous forests present more favour-

able conditions for regeneration, have met with considerable success.

In the Cameroons, as in Togo, all forest lands are held to be Crown property, as being *vacantes et sans maître*.¹ The grant of concessions is regulated by decree,² and for some years the exploitation of the high forest for valuable timbers has been in progress. Sylvicultural work has also been undertaken on lines similar to those adopted on the Ivory Coast. In the savannah regions the policy is to reserve all areas of high forest still existing, and to create plantations for the provision of fuel and for climatic and protective purposes. Proposals have been made³ for the protection of from a quarter to a third of the total savannah region, but it is not known how far this scheme takes account of the requirements of local cultivation.

An interesting point arising from the sylvicultural work in the high-forest belt is the question of replacing the valuable timber species removed in the course of exploitation. In some quarters it is held that the present work will result in the formation of dense almost pure crops of valuable species, but in others it is held that if the balance in the rain-forest belt is upset by attempts to raise only valuable timbers, soil and moisture may be adversely affected.

(f) *Belgian Congo*

Difficulties of transport have in the past stood in the way of the commercial exploitation of forests. This has been regulated by decree since 1934,⁴ but a government forestry service and a general forestry policy were not formed until 1936, when Forestry Officers were appointed to most of the provincial head-quarters. In 1937 these numbered six and are technical advisers to the commercial companies holding concessions, as well as conservators of the forests in native areas. They are assisted by some forty-six African forest guards. The *Comité Spécial* of Katanga has for some years had its own forest service. The reservation of forests is also in an early stage. One hundred and three reservations have been

¹ See Chap. XII, p. 789.

² March 8, 1926.

³ M. Rousseau, 'Rapport sur la politique forestière poursuivie au Cameroun', *Actes, 11^e Congrès International de Sylviculture*, 1936, vol. iii, pp. 658-62.

⁴ Decree of April 4, 1934.

made, some to conserve watersheds, and others to prevent the destruction of forests along motor roads.

Reafforestation is attempted mostly in the eastern provinces of the territory. Proposals are under consideration for the inclusion of afforestation in 'educative' agricultural work,¹ but in the Kivu District afforestation is said to have been undertaken voluntarily in certain areas and 600 hectares of trees have been planted. It is proposed to extend a system resembling *taungya*, which is used by the Nkunku people in the Inkisi and Natadi areas, who plant the seeds of indigenous trees and strip cuttings of other acclimatized trees on fallow land to restore the fertility of the soil. Certain of the concessionary wood-cutting companies undertake afforestation. Thus *Agrifor* and *Afco* are attempting plantations of *Limba* in the Mayumbe District; in the Kasai Province, *Exforka* and the *Forminière* regenerate their forests with *Tectona grandis* and other exotic species. Near Léopoldville *Otraco* has plantations, and other privately-owned plantations exist in the Kibali-Ituri, the Kivu, and Élisabethville areas. The *Inéac*² is organizing a forestry station at Yangambi and has undertaken a forestry reconnaissance of the region. The station will maintain a seed nursery and carry on research work.

The concessions for commercial exploitation amount to 103,000 hectares.

III. ORGANIZATIONS FOR FORESTRY RESEARCH

The research work in Great Britain is practically confined to timbers for commercial exploitation. The Imperial Forestry Institute³ at Oxford forms a centre for advanced studies and a bureau for information and for the identification of woods. Its members visit African territories and have made some valuable reports. A series of publications entitled *Forest Trees and Timbers of the British Empire* is issued from time to time. A Colonial Forest Resources Development Department was formed in 1936, financed by the Colonial Office. It is in close relation with the Forest Products Research Laboratory at Princes Risborough. This laboratory, which is a research establishment of the Department

¹ See Chap. XI, p. 630.

² See Chap. XIII, p. 953.

³ See above, p. 992.

of Scientific and Industrial Research, is concerned with research on wood and wood products. The laboratory undertakes the testing of timbers, and tests have been made for all the African colonies. The Advisory Committee on Timbers at the Imperial Institute in South Kensington is composed of members of the wood-using trades, and concerns itself mainly with questions relating to the development of trade; it works in co-operation with the Colonial Forest Resources Development department, and has issued publications on some African timbers. The Empire Forestry Conferences are held every five years and form a valuable link between Forestry Officers in various territories. Reference will be made at a later stage in this chapter to the question of co-ordinating the work of local officers engaged in research.

In the Union of South Africa, which is now self-contained in these matters, extensive silvicultural work is done, and research is carried out in connexion with the Forests Products Research Institution at Pretoria, which is equipped for the study of seasoning problems; experiments in the treatment of timbers against decay from fungus or insect pests are conducted in the Botanical Department of the University of the Witwatersrand. The Botanical Department at Stellenbosch University also collaborates with the pathological section of the Division of Plant Industry in the investigation of tree diseases. The forest service of the Union contains thirteen specialist research officers.

Forestry work in the French territories is co-ordinated by a Forestry Adviser attached to the Governor-General at Dakar. The official propaganda and information bureau called the *Agence Économique* deals with the French colonies and with the mandated territories of Togo and the Cameroons. It has nothing to do with trade in timber. The *Comité National des Bois Coloniaux* is a private organization dealing with tropical timbers from the point of view of scientific research and economic value, but it, too, is not concerned with trade.

In the Belgian Congo there is a forestry adviser for the whole colony. There is no separate provision made for research into colonial products, but an organization called the *Union Professionnelle des Producteurs de Bois Congolais* deals with the marketing of forest produce.

IV. FOREST BOTANY, ECOLOGY, AND STOCK-TAKING.

Botanical knowledge of the African forest is now well advanced; indeed, both in British and French circles some doubt has been expressed whether undue attention has not been paid to this one class of work. In the British territories the first study on the subject was that of F. Lely, dealing with the useful trees of Nigeria. The Imperial Forestry Institute has subsequently compiled a body of useful information from the specimens and other data supplied by British Forest Officers. This takes in the first instance the form of check lists; these in turn should lead up to annotated catalogues, and finally to regional floras. The first Imperial Forestry Institute list by Burt Davy and Bolton (1935) deals with Uganda, and the authors, in collaboration with members of the Uganda Forestry Department, show that 1,146 indigenous species are represented in that country. In 1934 the Uganda Forest Department itself issued a list of the native names of trees and shrubs in Uganda. The second list by Burt Davy and Hoyle (1937) includes all recorded trees from Nyasaland, and a third list for Nigeria, still in manuscript, contains 1,240 species and varieties representing a 50 per cent. increase over a first list published in 1914. Mr. J. D. Kennedy, silviculturist in the Forestry Department of Nigeria, has collected a large number of species in the colony, and published in 1936 a useful book on the forest flora of Southern Nigeria dealing with over 1,000 species, including 17 new species and 1 new genus.

The stock-taking, or enumeration of marketable species, forms an important part of the District Forest Officer's work. In South Africa the determination of all indigenous and introduced forest trees is undertaken by the Forest Research Section in co-operation with botanists of the Division of Plant Industry, and very few trees, if any, remain unidentified. A number of official bulletins have been published by the Division of Forestry giving the results of research and experience.¹ In Southern Rhodesia a vegetation map has been prepared distinguishing the main physiognomic types. In Northern Rhodesia a detailed ecological survey gives valuable information.² In Nyasaland a general reconnaissance of forest

¹ See *Division of Forestry Annual Report*, 1936, p. 33.

² C. G. Trapnell and J. N. Clothier, *op. cit.*

areas is complete, ecological investigation has been started, using soil classification as a basis, and simple working plans for village forests are being prepared. In Tanganyika Territory more is known about forest vegetation than in most other parts of East Africa, as a result of identification of species, general reconnaissance in connexion with the land development survey,¹ and ecological investigation of the Tsetse Research Department.² The enumeration of forest-growing stock has been carried out with reference to nearly all the Kilimanjaro and Minziro forests, most of the Shume-Magamba forests, some of those of Meru, and considerable areas of forests on public lands, containing stocks of *Chlorophora* and *Khaya*. In Kenya the identification of species in the forests is practically complete, but no wide-scale stock-taking has been done. Working plans are restricted to those forest areas which are at present under exploitation and to the considerable area of plantations. In Uganda a working plan has been drawn up for the Budongo forest as a result of aerial photographs which have revealed the extent of growing stock. This and Northern Rhodesia are among the few cases in Africa where air survey³ has been used for this purpose.

In Nigeria an extensive enumeration survey of forest reserves is nearing completion and will enable stock-taking to be put in hand over a large area, but at present only a small region is under working plans. A conservator for working plans has, however, been recently appointed; a useful contribution was made in 1934 by Mr. W. D. MacGregor on the silviculture of mixed deciduous forests. In the Gold Coast important work in connexion with forest ecology has been done by the late Dr. Chipp.⁴ The enumeration of trees in selected areas has begun and 735 square miles are under administration plans. Stock-taking and exploitation have been started in Sierra Leone.

Considerable information regarding some of the French African territories is available in the form of pamphlets. A. Bertin published a work on the trees of West Africa in 1919,⁵ and the recent book on

¹ See Chap. XII, p. 767.

² See Chap. XVII, pp. 1132, 1164.

³ See Chap. I, p. 10.

⁴ *The Gold Coast Forest*, Oxford Forestry Memoirs No. 7, 1927.

⁵ *Mission Forestière Coloniale*, vol. ii, *Bois de la Côte d'Ivoire*, and other volumes, 1919, et seq.

the trees of the Ivory Coast by Aubréville¹ is a finely illustrated work in three volumes which should prove of assistance to British forest officers; L. Bégué has also published a study of forests in the Ivory Coast.² In the Belgian Congo extensive investigations have been carried out, and the ecological studies of a Belgian Forestry Officer, Delevoey, in the Katanga have a particular value for the Forest Officers in Northern Rhodesia. Other valuable work has been carried out by de Wildeman (1920 and 1934), Vermoesen (1923), and Lebran (1935).

V. THE INTRODUCTION OF EXOTIC TREES

The early introduction of exotic trees in the Union of South Africa has already been referred to,³ and in recent years the planting of exotics has been proceeding on an ever-increasing scale. In the Rhodesias and parts of East Africa the planting of fast-growing exotic trees, particularly pines and eucalyptus, has formed an important part of the activities of the Forest Departments.⁴ The use of exotics for the formation of plantations to provide fuel and timber for towns and for the requirements of local industries has already proved a general success. In West Africa, both in the British and French colonies, the principal exotics are teak, *Cassia siamea*, *Gmelina arborea*, *Cedrela mexicana*, and *Dalbergia sissoo*. In Southern Nigeria some of the oldest teak plantations in West Africa, dating from 1912, are to be seen at Olokomeji, the growth being good; both *Cassia* and *Gmelina* flourish in West Africa in their earlier stages.

At the same time there are certain difficulties attending the growing of exotic timber. It is stated to have been the experience of Nyasaland that if exotic trees are to be successful, they must be grown on agricultural soil, which is not always available. There is, again, some doubt whether more than one or two rotations of the same exotic will be successfully obtained from the same site; in fact, fast-growing exotics may wear out the African soil more quickly than an indigenous tree grown more slowly. The experi-

¹ *La flore forestière de la Côte d'Ivoire*, 1936.

² L. Bégué, *Contribution à l'étude de la végétation forestière de la Haute-Côte d'Ivoire*, 1937.

³ See above, p. 987.

⁴ See R. S. Troup, *Exotic Forest Trees of the British Empire*, 1932.

ence of the Germans in Togo¹ shows that the reafforesting or re-planting of the savannah bush may prove a far from simple operation. Time may yet show that the best way of restoring the savannah bush—and it is certainly the cheapest and easiest—is to enclose it against cultivation, grazing, and fire, and to encourage an indigenous growth of African species. It has recently been found in South Africa that some of the exotic pine plantations bring about a drier condition of soil in the neighbourhood than hitherto existed, and farmers are warned against planting such trees in large numbers in certain areas. A committee of the recent Empire Forestry Conference in South Africa studied the question of the planting of exotics in relation to the problem of conserving water supplies and preventing erosion, but it was decided that further investigation was required before any conclusion could be drawn.²

VI. TIMBERS

The largest and finest timber for export from African forests comes from the West Coast, mainly Nigeria and the Ivory Coast. Mahogany (*Khaya*) till recently was the chief species, but several others have been placed upon the market, such as *obeche* (Ivory Coast, *samba*), *iroko* and African walnut (Ivory Coast, *dibétou*). It appears that the African colonies as a whole have yet to find export markets for even as many as fifteen or twenty timbers. In Nigeria the United Africa Company have exploited some thirteen species from the Benin forests. Only 16 of the 200 species of large-sized trees growing in the high forests of the Ivory Coast have yet been found to be exploitable.³ Three of these, mahoganies, *acajou* and *acajou blanc*, and *iroko* have been continuously exploited; the remainder have only been felled intermittently in dependence on market demands and contracts. It is probable that with the experience achieved both in exploitation and in laboratory tests further marketable species will be found, and studies in colonial woods are being carried out in France with this end in view.⁴

¹ See above, p. 1006.

² Empire Forestry Conference, South Africa, 1935, *Report of Committee on Forests in relation to Climate, Water Conservation, and Erosion*, pp. 12, 13.

³ A. Aubréville, *Les réserves de bois de la Côte d'Ivoire*, 1933, p. 1.

⁴ *Le gouvernement général de l'Afrique Occidentale Française*, Exposition Coloniale Internationale, 1931, p. 95.

The only timbers exported in any quantity from East Africa are the pencil cedar (*Juniperus procera*) to Europe and mangrove poles from the coast to Arabia and the Persian Gulf. There is a possibility of an export trade in yellow wood (*Podocarpus*), *mvule* (*Chlorophora excelsa*), and *mukushi* or Rhodesian teak (*Baikiaea plurijuga*), the latter being already exported in some quantity from the Rhodesias, while export is beginning from Tanganyika.

In the majority of areas exploitation is carried out by private agency, leases being given in which the details of working, girth limit of felling, royalty, and other conditions are laid down. The material is either exported in the log or converted before export; there is a growing tendency towards the latter method.

VII. MINOR FOREST PRODUCTS

A number of important minor products come from the African forests. Some of these are true forest products such as tans, dyes, fibres and flosses, gum arabic, resins, possible paper-pulp species, honey, wax, and medicinal drugs. Amongst minor products which pertain more to agriculture than forestry are the oil-seeds of the oil palm, shea, rubber, and the kola trees.¹

An important supply of tan stuffs from Africa is obtained from the introduced wattle, now largely grown in East Africa.² Mangroves also produce a tan; the extract is known as 'cutch' and is used for tanning fishing nets and sails. There is an export trade in mangrove bark in Tanganyika (as much as 9,000 tons in one year), and research is being undertaken into the possibilities of this trade in Nigeria, the Gambia, and Sierra Leone. There is also an old-established trade in mangrove beams (*borite*) from the Tanganyika coast to the Persian Gulf. Although not exported, certain vegetable dyes are used locally. There is a considerable dyeing industry in West Africa from indigo, with centres at Abeokuta and elsewhere in Nigeria; both wild and cultivated plants are used. Imported cotton cloths are dyed with the indigo dye, but aniline dyes are now coming into competition with it, and the question of their restriction is being considered, in the interests of the local industry. Fibres and flosses are not uncommon in the forests. Many trees and climbers yield rough cordage fibres; though

¹ See Chap. XIII, pp. 890, 911, 919.

² Ibid., p. 890.

serviceable for local purposes, these cannot compete with fibres grown as agricultural crops. Several species of the raphia palm are found in the rain forests which yield a tough fibre from the young unopened leaves.¹ *R. vinifera* and *R. gaertnerii* are found in West Africa and *R. munbuttorum* in East Tropical Africa. Coir is prepared from the husk of the coco-nut and made into mats and rough ropes. Flosses or 'silk cottons' are produced in considerable quantities from the covering of the seeds of certain species of trees, notably species of *Bombax*; the 'silk cotton' is, however, too brittle to spin. Another floss known as *kapok* is yielded by the *Ceiba pentandra*, and is to be seen in February in thick continuous masses like white snow lining the sides of the road or covering bare patches of land in dense masses. This product is being studied in central Nyasaland, in the Tanga Province of Tanganyika, and in Kenya; the seeds have been found to contain 28 per cent. of oil, and cattle cake can be made from the residue. In the Ivory Coast all isolated trees of this species in the savannah lands are marked for reservation.

The gum arabic of Africa is well known, owing to the fact that a considerable part of the world's supply comes from the Anglo-Egyptian Sudan, where it forms the most important article of trade next to cotton, and yields an annual value in recent years of about £750,000. It is an exudation from cracks or wounds in the bark of the trees, and is obtained from various species of acacia, the *verek* (*Acacia senegal*) being the most important. As a consequence of studies made in the Sudan by officers deputed from Nigeria and Tanganyika considerable progress has taken place in developing the gum trade in those territories, Northern Nigeria having exported about 1,500,000 pounds of gum in 1933. It has been suggested that co-operation between the different centres might result in better marketing schemes.² One of the difficulties is to secure a steady supply, collection as a rule being made only when crop failures have reduced the possibilities of obtaining cash from other quarters. Resins, though often confused with gums, are easily distinguishable as they are soluble only in alcohol or oil of turpen-

¹ Ibid., pp. 889-90.

² F. M. Oliphant, *The Commercial Possibilities and Development of Forests in British East Africa*, 1937, p. 19.

tine. The kinds used for making varnishes are known either as damars from the Malay States or copals from West Africa, where they are obtained from species of *Copaifera*, *Trachylobium*, and *Daniellia* species. The best quality comes from the Belgian Congo, medium quality from the Gold Coast and Sierra Leone, and the poorest from Nigeria. E. Mertens (1933) has given a full account of recent researches into the constitution of copal from the Belgian Congo, with special reference to its uses. In East Africa the chief copal tree is *Trachylobium hornemannianum*. Fossil copal known as Zanzibar animi is found chiefly in Tanganyika Territory, but exports are decreasing.

The most important indigenous rubber tree of Africa is the West African or Lagos rubber (*Funtumia elastica*) found in the ever-green forests from Uganda westwards; in addition there are various rubber vines (*Landolphia* species). An unhappy interest attaches to the sordid story of the collection of forest rubber in Africa. At one time it furnished as much as 80 per cent. of the exports of the Congo Free State, and was equally prominent in the early economic history of French Equatorial Africa.¹ Though in both cases some effort was made at a later stage to check by administrative action the grave abuses which for some years attended the grant of the rubber concessions, the system was really brought to an end by the competition of the *Hevea brasiliensis* from the Asiatic plantations. Both in Tanganyika and the Cameroons the Germans attempted the plantation of *Ceara* rubber, but this proved to be unsuitable to the climate. Some of the rubber from *Funtumia* is still collected in the French Cameroons and Equatorial Africa, but not on any considerable scale. *Hevea brasiliensis* is now cultivated by both native and European agency in Nigeria and the British Cameroons, which together exported over 4,000 tons in 1936. The Gold Coast has one plantation; Uganda has about 11,000 acres under rubber. The French Cameroons have three rubber plantations, and the Belgian Congo has 5,706 hectares under rubber. Production is cheap, and the possibilities, particularly for native cultivation, are believed to be considerable.

There are said to be openings for paper pulp production from African forests. Bamboo, the *Arundinaria alpina* of the eastern

¹ See Chap. XII, pp. 783-8.

mountains, elephant grass from Uganda and elsewhere, and some of the fast-growing softwoods of tropical Africa are suggested as possible sources of paper pulp. In South Africa attempts are being made to utilize pines, especially *Pinus patula*. None of the species, however, except possibly the South African exotic conifers, as yet shows much prospect of attaining commercial importance.

The oil palm (*Elaeis guineensis*) is indigenous to West Africa; it is rather an agricultural than a forestal product and is dealt with in Chapter XIII. The same may be said of the shea nut tree (*Butyrospermum parkii*), a native of rather dry country in West Africa now being grown in plantations. The kola tree (*Cola acuminata*) grows wild in West Africa. The nuts are eaten as a stimulant and are to-day largely obtained from plantations.¹

VIII. FOREST PESTS AND DISEASES

There is little special literature extant on either insect or fungal pests of African forests. Most of the forest entomological papers come from South Africa and deal with wood-borers, the eucalyptus snout-beetle, and insects affecting *Pinus insignis*. The staff of the Division of Plant Industry in the Union includes an entomologist, and his study of the eucalyptus snout-beetle has led to the control of this pest by biological means, except in the high veld, where conditions are unfavourable to the parasite. This is one of the few successful applications of the principle of biological control which Africa has produced. *Pinus insignis* has proved to be susceptible to diseases in parts of South Africa, but it flourishes in the Western Cape Province, where there is a good winter rainfall. The diseases of this tree have been studied in the botanical department of the University of the Witwatersrand. The gall-bug which attacks mvule (*Chlorophora excelsa*), an important timber tree of Uganda and West Africa, presents a special entomological problem. For some years it has been regarded as a serious pest; it has now been determined as *Phytolyma lata*, of the family Psyllidae, and a note on its life-history in Nigeria has been published by Mr. J. D. Kennedy.²

Indigenous trees seem little affected by parasitic fungi, but the susceptibility of introduced trees, especially *Pinus insignis*, threatens

¹ See Chap. XIII, p. 890. ² *Empire Forestry Journal*, vol. xi, 1933, pp. 37-55.

to be serious. Some pathological work has been done on agricultural and plantation crops, and in certain aspects is of direct interest to the forester; but the work on forest pathology alone is practically negligible. So far as the high forests of commercial value are concerned, however, it is doubtful whether at this stage the expense of undertaking special research into the question of pests, whether insect or fungal, would be justified.

IX. CONCLUSIONS

In dealing with the subjects which fall within the field of work of the technical departments it is not always easy to distinguish the internal problems of a department from those which have a wider aspect and come within the field of general policy. The present case presents less difficulties than some others in this respect. Technical rather than general considerations must, for example, decide the extent to which exotics are to be used in re-forestation operations, or whether it is preferable to exploit the secondary timbers for home consumption rather than to seek an external market for the few more valuable timbers.¹ It is, again, technical considerations which must determine the manner in which a forest service can make the most economic use of the establishment at its disposal. The concrete question of chief importance which arises in this respect is the extent of the staff which should be detached for the purpose of research. There are those who feel that there was at one time an undue tendency for the forest authorities in the British Empire to rely on Indian experiences, and to argue that the road to better forest administration and enhanced revenue lay through research into their forest problems, and in particular into the question of the utilization of local products. This view, however, tended to overlook the fact that the Indian Forest Administration had only approached its strong position after forty years of preliminary work, which had built up the great forest estate of India. Routine operations, such as those which concerned the protection of the forests, were adequately organized; there was a strong establishment of trained Indian officers, many capable of taking charge of independent posts; and by the time that forest research work was systematically under-

¹ See above, pp. 984 and 1007.

taken, the staff was large enough to allow of officers being specially deputed for this work, without weakening the field staff. There was nothing in Africa at the corresponding period which was comparable to the position in India. Even at the present time, staffs in most areas are barely adequate to undertake the vital work of conservation of existing forest lands. In these circumstances it would perhaps be premature to detach officers for research work of that type which is commonly known as 'long range inquiry'. Again it would seem inadvisable that the desire to secure an immediate increase in the commercial output of the forests should constitute such a preoccupation as to obscure the importance of the technical duties which the Forest Officer has to discharge in other directions. Even from the commercial aspect, certain field investigations are still needed in order to ascertain the proportion of potentially marketable species in particular forests. The work of 'stock-taking' has been undertaken only recently;¹ and in the absence of precise information regarding the stocking of the forests, and also on account of the lack of establishments, it has been difficult to produce working plans. Until forest areas are brought under the control of such plans it could scarcely be said that scientific forest management has been established.

The problem of securing closer co-ordination in the work of the forest services in different territories is not entirely one of a technical character. The Empire Forestry Conference, held every five years, establishes a useful link between officers scattered throughout Africa, and much value attaches also to the reports of the experts who from time to time are sent out by the Colonial Office on visits to the dependencies. Some value attaches also to the meetings of Forest Officers held in connexion with the Governors' Conference in East Africa.² But co-ordination of forest work does not seem to go farther than the stage of conference.³ In matters such as forestry and the closely allied subject of soil erosion,⁴ political frontiers are to a great extent arbitrary barriers; many of the problems which confront the experts on either side are identical, and it may not unreasonably be felt that common executive action is needed for their solution. It has been suggested that this pur-

¹ See above, p. 1010.

² F. M. Oliphant, *op. cit.*, p. 3.

³ See Chap. VI, pp. 182-5.

⁴ See Chap. XVI *passim*.

pose might best be achieved by the appointment of Inspectors-General of Forests for East and West Africa respectively. The institution of a post of this nature, dealing with a number of governments who are not federated or combined under any central administration in other aspects of their work, presents certain obvious difficulties. It is possible, however, that they could be surmounted by giving the officer (whose precise nomenclature is a matter of secondary importance) the status of adviser to the different governments; whether the Forest Officers in the different territories should be combined in an eastern and western cadre is a further question which involves points of expediency rather than of principle. Though the circumstances are not identical, some analogy for the appointment of a common supervising officer may be found in the existence of a Forestry Adviser to the Governor-General of French West Africa at Dakar. It has been suggested, again, that an African forestry publication on the lines of the *Indian Forester* or *Malayan Forester* might further be of value in promoting common action across the different administrative frontiers.

The expansion of forest work, like that of most of the technical departments of state, depends largely on the possibility of creating a cadre of African assistants, with an education and a technical training which will fit them to undertake charges of separate responsibility.¹ The extent to which these charges must continue to be of subordinate character depends on the proofs which Africans may give of their practical capacity. Up to the present no steps have been taken in British territories to create for the forest services a class equivalent to the African 'medical aids' or assistants who are now being trained for the health services.² In 1937, however, a Conference of Conservators from Uganda, Kenya, and Tanganyika made proposals for the institution of an inter-territorial forestry training school as part of the suggested higher college at Makerere.³ Experience gained of Africans in a lower range of work shows that they are very amenable to training for a forest life. There are schools for the training of subordinates of the forester and forest guard class in Uganda, Tanganyika, and

¹ See Chap. VI, pp. 255 ff.

² See Chap. XVII, pp. 1182 ff.

³ *Report on Tanganyika Territory*, op. cit., 1937, p. 152.

Nigeria; courses are also held in the Gold Coast and elsewhere. The training of this class is not yet, however, fully organized, though the matter is of some considerable importance, since, apart from the need for the possession of the necessary technical qualifications, the rangers and foresters form the link between the Forest Department and the native farmer.¹ In the circumstances in which forest work is conducted, it is not easy to exercise a close supervision over the day to day work of these subordinates, and the ability of the Forest Department to carry out its work of conservation without undue friction or disturbance of native feeling depends largely on their character and capacity.

There remains a major problem which is essentially one of general policy. There is now no lack of recognition of the necessity of extending the area of forest reservation, whether in order to preserve as a state asset the remainder of the high forest, which is peculiarly liable to destruction and degradation in Africa, or to protect the water supplies and the productivity of the soil. But both the determination of the exact extent of reservation which is required, and the method of its achievement, present problems of some complexity to the administration. There is no one formula which will establish the amount of reservation needed for protective purposes. It is not difficult to decide what forest land is required to conserve a recognizable catchment area, or to protect the sources of a particular stream. The problem becomes more complex when an administration is urged to exercise its powers in order to reserve large areas for the general conservation of the water supply of the territory or to exercise an influence on its climatic conditions. As has been seen, policy in Nigeria has for some years sought to secure a minimum reserved area of permanent forest equal to 25 per cent. of the total land area;² elsewhere 30 per cent. has been suggested as an ideal. Projects such as these may be correct in substance, but they necessarily rest on a somewhat arbitrary basis; and even if it could be demonstrated that the formula is scientifically correct for Nigeria, it would not automatically apply to Rhodesia. Nor, again, can the question of reservation be approached in the abstract. There are, no doubt,

¹ *Higher Education in East Africa*, Colonial 142, 1937, p. 108.

² See above, pp. 1000 and 1007.

areas in which a considerable extent of woodlands could be reserved without seriously reducing the lands necessary for native cultivation; but there are others (and those often in situations where reservation is most patently required) in which reservation would seriously curtail the lands now regularly cultivated. It is true that the need for a considerable proportion of the area thus occupied is due to the practice of shifting cultivation. But, as has been observed,¹ though this practice has been in the past and is even to-day undoubtedly responsible for the degradation of much high forest, its practice is often far less of a danger to the savannah or the scrub bush. It involves mischief on any serious scale only when shifting cultivation departs from its traditional methods, in order to comply with demands arising from the introduction of modern economic conditions. On the other hand, modern science has not so far been able to indicate methods, suitable for general adoption, which will be equally efficient as a means of getting the best results from a soil so subject to rapid exhaustion as that of Africa. Mixed farming has rightly been indicated as one remedy; but it is a remedy which cannot in present circumstances be applied on a very wide scale. For some time to come, therefore, calculations regarding the area required for native occupation must continue to be based on the prevalence of the practice of shifting cultivation. It is also true that when considering the areas necessary for grazing, it will not be possible entirely to neglect the African social habit which, at all events in East Africa, results in the maintenance of an uneconomic number of cattle.²

The legal position in regard to conservation presents no serious difficulty in the greater part of Africa. In the Union and Southern Rhodesia the Crown has proprietary rights over all lands over which no private title has been registered, and though the latter may constitute a very large area, there are, nevertheless, still considerable blocks of Crown land, including the native reserves. In Basutoland and Swaziland there are, it is true, difficulties, as reservation could only be effected in the former and some part of the latter by the native administrations. In Northern Rhodesia and the British East African territories, the proportion of land alienated in title is relatively small, and, except for the Mailo lands

¹ See above, p. 986.

² See Chap. XVI, pp. 1068 ff.

of Buganda,¹ or lands which come under treaty rights, such as Barotseland, the Crown has proprietary rights over all other lands, though it is subject, in the territories which have created native reserves, to the effect of ordinances which place the reserves in trust for native use. In Northern Nigeria and the Northern Territories of the Gold Coast the Crown has an over-proprietary right in all except alienated lands, but in the Southern Provinces of both territories there are legal difficulties which, as already shown, have constituted an obstacle to reservation.² The provisions of the French and Belgian laws, which give the state complete control over all 'vacant' lands,³ renders the operation of reservation, from the purely legal standpoint, one of comparative ease. The question of the reservation of forest areas, however, has two sides. It does not merely involve the withdrawal of the use of lands from those who claim that custom gives them a right of one kind or another over them, to many of whom it must appear that the operation is only designed to help people, such as the dwellers along the lower reaches of the rivers and streams, who are entirely different from those who are called upon to make the sacrifice. In actual practice the most difficult of the problems to which reservation gives rise is that of discovering a machinery for the management of the reserved lands which, while giving them the necessary protection, will do so with as little friction as possible. Only those who have experienced it can realize the depth of the resentment felt by cattle owners who see their herds, hard hit by scarcity elsewhere, excluded from pastures which are all the more tempting because they have been carefully preserved for other purposes. It is largely these considerations which have led governments to substitute for extensive schemes of state reservation, the creation of small village forests (as in particular in Nyasaland),⁴ or to the association of native authorities in the protection of the forests, as in Tanganyika or Nigeria.⁵ There are, in the former case, circumstances which especially favour the scheme, such as the fact that the scarcity of woodlands provides an induce-

¹ See Chap. XII, p. 851. The principal agreement of 1900 and the additional Forest Agreement of 1905 specially provided for the case of all forest lands other than the Mailo lands.

² See above, pp. 999-1000 and 1002.

³ See Chap. XII, pp. 784 ff. and 791.

⁴ See above, p. 994.

⁵ See above, pp. 996, 1000.

ment which is wanting where they are more extensive. But the scheme has its attractions, and other administrations will be able to judge from the experience of Nyasaland how far it can be successfully applied in their territories. Administration either by the 'village' or native authority systems is admittedly less efficient than that carried out by a state establishment. But some falling off in the standards of forest management may justifiably be faced, if the goodwill of natives is to be secured for measures designed for the preservation of their forest lands.

The fact that there are many difficulties inevitable in reservation does not relieve the administrations of the obligation to press on with it wherever they find it feasible. Their hardest task will perhaps lie in carrying the African with them, for experience elsewhere shows that the doctrine of forest conservation will encounter opposition among people who readily accept modern practice in most other respects. Rules to protect trees and forest reservations are of little use unless those who enforce them have an appreciation of their aims; the penalties are either made too light to be effective¹ or enforcement is neglected. There is, however, no reason to believe that African methods of using forest resources cannot be modified to suit modern conditions, or that simple measures of conservation cannot be practised by trained Africans with the co-operation of chiefs and their people. The need for education in the proper attitude towards forest conservation adds point to what has been said on a previous page regarding the training of an African forest staff.²

The right policy to be adopted in regard to their forest lands must always remain a matter of concern to the administrations. As the population increases, the adjusted balance between the numbers of the people and the area of land becomes upset, and the destruction of vegetation increases proportionately. It may be said, therefore, that the need for careful control and planning of the use of land increases in ratio to the density of population. The stimulation of native production also tends to extend the destruction of woodland by introducing new competition for productive land. Everything points to the need for adopting a sound forest policy from the earliest possible moment, and for making every effort to secure that its principles are understood among the African people.

¹ See above, p. 1002.

² See above, p. 1020.

CHAPTER XV

THE PROBLEM OF WATER SUPPLY¹

I. GENERAL CONDITIONS OF THE PROBLEM

THE existence of large arid or semi-arid tracts in Africa gives special importance to the possibility of utilizing irrigation from its rivers and streams or from large storage works for the protection or expansion of cultivated areas. British India can claim that 12½ per cent. of the total area sown is now irrigated;² its outlay of £115,000,000 on state irrigation undertakings has resulted in an annual production of irrigated crops valued at £77,000,000. The Punjab Province, where conditions most nearly approach those of the semi-arid zones of Africa, can point to the fact that of a total cultivated area of 26,750,000 acres, about 10,500,000 are now protected by canal irrigation, and a further 4,250,000 by wells. In Egypt, with a cultivable area estimated at about 7,250,000 acres, some 5,830,000 acres are now secured by permanent or basin irrigation from the Nile. India and Egypt are, no doubt, exceptional in the use made of irrigation; but elsewhere, as in the more arid tracts of Australia and the United States, storage or flow irrigation is becoming a factor of increasing value; in the former 3 per cent. and in the latter 5 per cent. of the cropped area are now irrigated. Experience has, however, shown that there are definite limits to the economic use of large-scale irrigation enterprises, even where the necessary physical conditions of supply, commanded area, and suitable soil are proved to exist. The interest on the initial outlay and the annual expenditure for maintenance constitute a first charge on production which can be met only from the growth of profitably marketable crops with suitable facilities for transport. That charge is of a fixed nature, and is not capable of adjustment with variations in the price of agricultural produce. Whatever, therefore, may be the indirect advantages of undertakings involving large capital outlay, they can seldom be directly remunerative where a purely subsis-

¹ Much of the material for this chapter was kindly assembled by Sir Thomas Ward, C.I.E., and Sir Arnold Musto, C.I.E.

² *Statement exhibiting the Moral and Material Progress and Condition of India, 1933-4*, p. 99.

tence economy prevails, or where a sparse population practises an extensive rather than an intensive type of cultivation, or where agriculture is only an auxiliary to stock-raising. In those circumstances the small irrigation work, availing itself of natural river flow, or of inexpensive methods of rain storage, is a more useful object for state encouragement, and it is in those conditions also that the development of the use of underground waters for the provision of drinking water for men and animals becomes of primary importance, as an agency for stabilizing cultivation or assisting the redistribution of the population.¹ The significance of these facts in African territories is best illustrated by a study of the nature of the water problems which different countries have had to face, and the steps so far taken to meet them.

II. DEVELOPMENT IN DIFFERENT TERRITORIES

(a) *The Union of South Africa*

In the more arid countries of the world irrigation has a double value, first, as a guarantee against drought, and secondly, as a normal means of securing cultivation and improving its output. In the Union of South Africa drought does not carry the same danger of famine as in Asia, where the population densities are higher; nevertheless, its recurrence has gravely retarded economic progress. The Drought Commission of 1923² assessed at £16,000,000 the direct losses in the drought of 1919; the drought of 1933 is calculated to have resulted in the loss of 8,204,392 animals,³ and the Union again suffered very severe losses between that date and 1936. The direct effects of drought, however, are seen more in the areas devoted to animal husbandry than in the agricultural districts. Measures to protect the stock-raiser belong to a somewhat different class from those intended for the protection or improvement of cultivation, and will be separately dealt with. It is proposed to deal, in the first instance, with irrigation primarily designed as an aid to agriculture.

Irrigation in Aid of Agriculture. The Union may be divided into three zones: first, that in which irrigation is unnecessary for the majority of crops, such as the coastal belt of Natal and portions

¹ See also Chap. XVI, p. 1067.

² *Report*, para. 6.

³ 'Annual Report of the Secretary for Agriculture', *Farming in South Africa*, Dec. 1934, p. 470.

of the south coast; second, that in which no crops can be grown without irrigation—namely, the greater part of the Karroo in the Cape and in the south-western Free State; and third, that in which irrigation is necessary for certain crops during portions of the year. This last zone includes the south-western corner and the eastern portions of the Cape, the north and east portions of the Orange Free State, and the greater part of the Transvaal. Here the need for irrigation arises rather from conditions attending the seasonal distribution of rainfall than from a deficiency in the total. The characteristic feature of South African meteorology is the shortage of rainfall in the months (August to October in the southern, and October to December in the northern areas) which are most critical for agriculture; it is during this period that lack of precipitation coincides with rising temperature, hot winds, and low humidity. There is indeed a certain amount of summer rainfall in the northern areas, but it is irregular and produces extensive flooding. While, however, nature has created conditions which make irrigation essential for successful agriculture in the second zone and of considerable value in the third, she has at the same time created other conditions, which limit the extent to which it can be usefully employed.

South Africa has a relatively low proportion of cultivable soils. Apart from the considerable proportion of hilly or mountainous country, much of the plateau land consists of shallow soils overlying either original rock or thick beds of secondary formations, and is of a type unsuited for the more intensive cultivation which will repay the outlay on irrigation. It was calculated by Mr. F. E. Kanthack¹ in 1922 that not more than 2 per cent. of the 302,000,000 acres of the Union proper is good or fair cultivable soil, and that only two-thirds of this, or 4,000,000 acres, would repay irrigation, if water were available. As will subsequently be seen, there are economic conditions which further reduce the area to which irrigation can usefully be applied.

The Irrigation Systems in Use. Irrigation in the Cape has for the most part been based on the flood system originally developed to meet the needs of lucerne growing on the ostrich farms. A large volume of water is led rapidly from the stream, and distributed

¹ 'Irrigation in South Africa', *The South African Geographical Journal*, Dec. 1922, p. 14.

over the entire area of irrigable land to a depth of 4 to 6 inches. In the more arid regions of the north-west Cape this system was carried a step farther, flood water being held up by embankments across flat valleys, and distributed over the series of basins thus formed. The system had the merit of low initial outlay, being estimated to cost between £2 10s. and £10 per acre irrigable. The areas physically adapted to the use of this system are, however, restricted, for the valley lands commanded by flood water are nowhere extensive, and the possibilities of flood irrigation are approaching exhaustion, with the result that recourse must in the future be had to supplies fed from storage works. In the Transvaal flood irrigation is less extensively practised, for such rain as falls during the wet season is usually sufficient for cultivation, and the valley lands are not so suitable for irrigation as those in the Cape. The primary need is for irrigation during the dry season, and the supply in the streams during the dry months is so scanty that storage in some form is essential. The greater outlay required for storage works, as compared with the flood system, has impeded the extension of irrigation in the Transvaal and the Orange Free State.

Government Irrigation Policy. Prior to union in 1910 irrigation was in the main confined to the Cape Colony. The first legislation was that of 1877, when an Act was passed providing for advances for the purpose of conserving water, and during the decade before the Boer War a number of state irrigation schemes were launched. These failed, partly because they were not carried out by specialists, and partly because of the policy of settling poor whites with no knowledge of irrigation farming on the redeemed land. Co-operative enterprise then entered the field, and was stimulated by the Cape Irrigation Act of 1906. From 1906 to 1914 was a period of great activity and many irrigation districts were proclaimed and irrigation boards formed to which large sums of public money were loaned. The irrigation works, as has been shown above, were comparatively cheap, and the rates charged by the boards were low, but the capital cost of bringing the land under cultivation was heavy, and this the farmers had to meet themselves. They were seldom able, therefore, to manage more than twelve acres under irrigation, though the average holding was far larger, and was all liable to irrigation

rates once an irrigation district had been proclaimed. Owners with excessive areas of rateable land which they had not been able to develop within the period of grace allowed by the Act found themselves unable to pay even low irrigation rates. The collapse of the ostrich feather boom aggravated these difficulties. When the demand for lucerne had gone, farmers had to turn to other crops, which all need a more regular water supply, with the result that the flood irrigation systems had to be changed into perennial systems. Large and expensive storage works became necessary, so that the capital burden on irrigable land, heavy before, became in many cases unbearable, and there were many failures and continuous pressure for the write-off of loans. This collapse could have been avoided if the granting of a government loan to an irrigation board had been made conditional on all undeveloped irrigable land being sold to the government at prairie value for settlement schemes, but the courage to adopt such a policy was lacking at the time.

In 1926 the Union Government instituted an Irrigation Commission, which was charged primarily with the task of scrutinizing projects, and the co-ordination of the operations of the different agencies concerned in irrigation. In 1934, the Act¹ authorizing the extension of the Vaal river scheme made a significant advance in its assertion of state rights to the water of the river. Riparian owners had acquired rights under common law, but in order to secure the most beneficial use of the water in the general interests of the community, the government found it necessary, while protecting rights of user already acquired, to limit the right of the riparian owner to the use of one-fifth of a cusec of water for every mile of frontage. The problem created by the claim of riparian owners to common law rights in water is one which, as will be seen, has arisen also in Kenya and Tanganyika. In further legislation,² the government provided for a measure of expropriation of lands required for settlement under large national schemes; it prescribed the Water Board instead of a court of arbitration as the tribunal for deciding claims.

Up to 1934 government itself had been responsible for a considerable number of schemes, but the Hartebeestpoort and Oli-

¹ Act 38 of 1934.

² Act 46 of 1934.

phants River Works alone involved large expenditure.¹ In 1934 it sanctioned the Vaal Hartz scheme, an undertaking of greater magnitude. The site of the work was chosen in consultation with the Rand Water Board, which contributed to the cost. The big reservoir on the Vaal is of great value to the Witwatersrand, and for the first time in the history of South African water law, large quantities of water have been made available for industries.

The commanded area on the Vaal project is calculated roughly at 103,000 acres, but it is not easy from the published figures to judge how far its value as an irrigation project will justify the estimated expenditure of £4,000,000. Complete figures of the area under irrigation in the Union are not available, but an estimate published for 1934-5² put the total at 352,943 acres. Of the area cropped under irrigation, 41 per cent. was under cereals, 23 per cent. under lucerne, 7.5 per cent. under citrus, and 8.5 per cent. under vines and tobacco. Up to 1935 the state had spent about £11,000,000 on irrigation, of which some £5,861,000 represents loans and advances, and the remainder direct expenditure by the state. To the latter must be added some £4,000,000, to which the state is committed on the Vaal Hartz and other schemes. Of the loans and advances only £665,000 had been repaid, and £3,541,000 had already been written off. It is estimated that in all a total of £4,500,000, or 76 per cent. of the whole amount advanced, may have to be written off as irrecoverable. The aid given on this account must be regarded as a part of the subvention accorded to agriculture. The Union has not yet published any systematic account of its irrigation work, giving such necessary information as commanded and cultivable areas, actual crops grown, the average 'duty' per unit of water, or the return to capital outlay. No accurate comparison is therefore at present possible with the efficiency attained by similar schemes elsewhere, but it is stated that steps are being taken to compile such complete records.

The Potential Development of Irrigation. It has been shown that the area having soil suitable for irrigation is estimated at not more

¹ See *Report of the Director of Irrigation for 1934-35*, p. 43, for a schedule of state irrigation works and their cost.

² *Ibid.*, pp. 26-7.

than 4,000,000 acres. The study of the relationship of rainfall and run-off in South Africa involves problems of some complexity; it was, however, calculated in 1922 that, on the basis of run-off, water might be considered to be available for not more than 3,000,000 acres. Economic conditions would, however, seem to impose a further limitation on the possibility of irrigating any large proportion of this area. The cost of constructing storage supplies has hitherto varied from a minimum of £14 to £160 an acre rateable, from which it would appear that the cost per irrigable acre must be considerably higher. The cost of the larger-flow irrigation schemes in India is not strictly comparable, but it may be noted that the recent Sind Barrage scheme showed a capital cost of about £3 an acre annually irrigable; a more relevant comparison could be made with some of the larger Indian storage schemes, such as that at Bhatghar in Bombay, with an annual irrigation of 80,000 acres, and a capital cost of £5 10s. per acre irrigated annually. This was erected at pre-war prices; an extension of the scheme with a more expensive form of dam will give over its enlarged area a capital cost of £20 17s. 6d. per acre irrigated annually. From such figures as are available the cost of the Vaal Hartz scheme will be about £40 per rateable acre, and of course a much larger sum per irrigable acre. It may be noted that water storage in South Africa is made still more costly by the high percentage of evaporation and the rapid silting up of the reservoirs,¹ which are fed by the *débris*-laden run-off from barren mountain ranges; the storage capacity decreases within a comparatively small number of generations unless expensive schemes of head-water reafforestation are undertaken. Thus the cost of constructing irrigation works, together with the cost of preparing the land for irrigation, is generally so great in South Africa that land potentially irrigable has little greater value than similar non-irrigable land, and there is no justification for selling at £10 or more per acre land with an unimproved value of £2 per acre, merely on the ground that it can be irrigated; before irrigation a further outlay of some £25 per acre may have to be incurred. Unless irrigated land is carrying high-grade crops which command a ready market, the farmer cannot afford a total capital outlay of

¹ See Chap. XVI, p. 1060.

much more than £10 per acre, especially as he runs many risks in South Africa besides that of water shortage. It will only be possible to undertake future schemes if the government is prepared to bear a considerable share of the initial cost of providing storage water and of developing the plots up to the productive stage. It was no doubt considerations of this character that led the Director of Irrigation in the Union to state in 1930 that the maximum area which could be economically irrigated did not exceed 1,000,000 acres.

Irrigation for Stock-Raising Purposes. It is reasonable to feel that the most profitable use of irrigation lies in projects which will provide greater security to the stock-raiser. It was in this direction, indeed, that the recommendations of the Drought Commission of 1923 mainly tended. There is a vast extent of good grazing veld, but its stock-carrying capacity is reduced by irregularity of rainfall, the uncertainty of drinking-water supply, and the absence of facilities for forming reserves of fodder. The losses of stock-raisers in times of drought are, as has been shown, immense; the figures available also seem to point to high mortality even in normal years. There is justification for the view, which has been strongly held in some quarters, that such limited means of irrigation as the rivers and streams can supply would be better devoted to the growth of reserves of fodder, save perhaps when utilized for crops of exceptional value, such as citrus. Irrigation would thus perform a valuable function in stabilizing the animal industry, and the insurance afforded against the recurring losses of stock-raisers might reasonably be held to compensate the state for bearing a part of the cost involved. The possibilities of this use of irrigation have not yet been fully explored, but if further investigation appears to justify expenditure in this direction, then it would seem that available supplies of water would have to be utilized in small schemes, scattered over as wide an area as possible, rather than in major projects. A considerable part of the assistance to stock-raisers in the Union will, however, continue to come as at present from the use of subsoil water or the provision of small dams for storing rainwater. Indeed, the development of South Africa already owes more to the utilization of underground than of surface water, and there is a measure of truth in the claim of Dr. A.

du Toit' that 'more has been achieved towards the general development of the country from the comparatively few thousands of pounds spent annually upon state boring, than from all the millions expended upon large diversion and storage schemes'.

The Use of Underground Water Supplies. The Government of the Cape first began boring by state agency in 1904, and a boring branch of the Irrigation Department was created in 1910. Under the present system the state supplies the machinery and establishment, while fuel and labour are provided by the farmer. The average cost to the latter has varied from 16s. 2d. per foot drilled in 1919-20 to 13s. 3d. in 1933-4; the average depth of boreholes in the Union is 150 feet, and in South-West Africa about 260 feet. In the Union reserves the expenditure is undertaken by the Native Affairs Department, and of late years a commendable expansion of boring has taken place. The experience gained by the Irrigation Department and the surveys made by the Department of Geology now enable drilling to be undertaken in a systematic way with knowledge of underground conditions. It would appear that there is commonly no actual 'water table': the supply in all cases is maintained by infiltration through pervious strata from annual rainfall, and is usually of local and not far travelled origin. The character of the subsoil beds rather than the amount of rainfall seems, therefore, to determine the amount of water available; there is, for instance, less trouble in obtaining water in the semi-arid Karroo than in the Transvaal or Natal with treble the rainfall.² The boring branch from 1903 up to March 31, 1935, completed 19,473 boreholes in the Union. Observations show that the average supply given by each borehole is between one-thirtieth and one-fortieth of a cubic foot per second, or sufficient at the most for only about 7 or 8 acres of mixed crops; it is therefore of little use for agricultural purposes, but of great value for providing drinking water and for garden use. Artesian supplies have been found only in the Uitenhage district of the Union and in Namaqualand and east of Marienthal in South-

¹ A. L. du Toit, 'Borehole Water Supplies in the Union of South Africa', *Proceedings of the South African Society of Civil Engineers*, vol. xxvi, 1928, p. 74.

² A. L. du Toit, *Geology of South Africa*, 1926, p. 420.

West Africa: they may prove to be of some value for small irrigation schemes.

Small Dams. The value of the rainwater dam lies not only in its provision of an emergency water supply, but in assisting to prevent erosion. The embanking of slopes helps to prevent 'sluiting'; and an increase of drinking places, by allowing the substitution of fenced paddocks for the 'kraaling' and herding of stock, reduces the trampling which is one of the chief causes of erosion.¹ Up to a recent date this fact was not sufficiently appreciated by farmers, but the Union Government has now given substantial stimulus to the making of dams, by action taken as part of its anti-erosion programme. Owners of farms who build dams can either recover 25 per cent. of the cost, or receive a loan covering the expenditure on the dam, subject to repayment within thirty years at 3½ per cent. Special terms are given to farmers who construct dams with European labour.² It has been contended with some justice that the expenditure on these objects constitutes a legitimate use of the windfall from the price of gold; it is the most effective insurance which the Union can make against the results of a possible decrease in the profits of the mining industry. A certain number of dams have been made by the Native Affairs Department in the native reserves, though a great deal more work of this nature remains to be done; in the Transkeian Territories the General Council has built a considerable number, some 250 having been constructed in the Umtata District alone.

(b) *South-West Africa*

In South-West Africa irrigation is practically non-existent, and the natural water resources of the territory offer scanty facilities for its development. With the exception of the Orange river in the south, the Okavango and Kunene rivers in the north, and the Zambesi and Kwando rivers in the Caprivizipfel, all the streams in South-West Africa flow intermittently even in the rainy season, and in the east many of the rivers sink out of sight in the Kalahari desert. Waters coming from Portuguese territory inundate Ovamboland, but owing to the silting up of channels in the Kunene river in Portuguese territory, the supply is decreasing. An inter-

¹ See Chap. XVI, pp. 1067, 1080.

² *Ibid.*, pp. 1082 ff.

national commission reached an agreement in 1926, allowing the Government of South-West Africa to clear channels upstream and to construct a dam about 3 kilometres above the Rua Cana Falls. This project was, however, abandoned owing to the high cost. Meanwhile the delimitation of the international boundaries has resulted in numbers of the Ovakuanyama tribe being in Portuguese territory; most of these are anxious to reunite in South-West Africa, but are unable to do so owing to lack of water supplies. Boring operations have proved a failure and other ways out of this difficulty are being explored. The situation was relieved to a great extent by the heavy rains of 1934 and by floods in 1936. Wells have been successfully sunk in the Eastern Ukuanyama, from which extension work eastwards is being undertaken, allowing settlement in a strip of country twenty-five miles long.

When the native reserves were marked out 124 boreholes were put down and £22,000 was set aside for this purpose, apart from Trust funds. During the period 1927-35 the boring branch of the Union Irrigation Department had completed 1,457 boreholes, but many of these were on European farms or in the Police Zone. In 1936 it was stated that, as much of the work in the reserves falls to the aged and infirm, owing to the absence of able-bodied men at work, the hand-pumps provided for the Hottentots have proved unsatisfactory. Considerable work remains to be done in sinking wells and repairing dams both in the reserves within the Police Zone and elsewhere.

(c) *Bechuanaland Protectorate*

The history of hydrography in the Bechuanaland Protectorate has an interest of its own. When Livingstone first visited the Victoria Falls he was impressed with the striking evidence which they offered of river erosion, and formed the opinion that there had once existed a vast lake in the northern Kalahari, the waters of which had been drained away by the Zambesi through a great rent in the earth which determined the Victoria Falls. Seventy years later his theory was revived in a modified form by the late Professor Schwarz,¹ who suggested that the Zambesi, by capturing

¹ *The Kalahari or Thirstland Redemption*, 1920. See E. B. Worthington, *op. cit.*, chap. iv.

the waters of the Linyanti (Chobe) river, had drained away the waters of the Okavango river system and incidentally those of Lake N'gami. He held that the loss of these inland bodies of water was responsible for the aridity of the central parts of southern Africa, and anticipated that if the lost lakes could be restored, there would be an increase of rainfall over so vast an area that danger from drought in South Africa would be a thing of the past. Scientists gave no support to Professor Schwarz's theories, and little of the public interest which they once attracted now survives. In 1925 a mission dispatched by the Union Government, while finally rejecting the views of the professor, proposed that an area of 125,000 acres within the Matabe depression might be irrigated from the Linyanti river at a cost of about £5 an acre, and that about 30,000 to 40,000 acres on the eastern part of the floor of Lake N'gami might be developed at a cost of about £6 an acre.¹ The schemes were not carried out, however, in view of the scarcity of population in the native reserves, the difficulties of transport and lack of markets, and the existence of tsetse-fly and endemic malaria in part of the delta area.

The immediate need of the Bechuanaland Protectorate is less for agricultural irrigation than for the provision of an adequate supply of drinking water; it is indeed clear that the serious lack of water for human beings as well as for cattle is one of the chief obstacles to the development of the country.² In the south is the Kalahari desert; in the north the whole of N'gamiland to Lake N'gami in the south and along the Botletle river as far as Rakops to the west, is dependent on the flow of the Okavango river after its waters have spread through vast areas of swamps. Since 1925, which was the last occasion when water found its way along the Botletle river and to Lake N'gami, the channels through the swamps have become more and more restricted by silting and vegetable growth, and in 1932 work was started to clear and remove obstructions along the main channels. During 1933 and 1934 grants of £4,000 were made for this purpose from the Colonial Development Fund. Some success was attained, but the work seemed to justify a larger expenditure, and a further grant of £8,000 has now been made from the

¹ *Report of the Kalahari Reconnaissance, 1925.*

² *Report on the Financial and Economic Position of Bechuanaland, Cmd. 4368, 1933, p. 110.*

fund to enable clearing operations to be continued and a comprehensive survey to be undertaken. There are, it may be noted, those who would prefer to drain the Okavango swamps and use the waters to grow rice and other crops; the cheapness of such a scheme would, they believe, justify it in spite of the difficulties of sparse population and lack of markets which would have to be faced. This matter is one which may repay further investigation; meanwhile it is clear that the question of water supply in other parts of the protectorate needs serious attention. This need is best met by a development of the supplies obtainable from underground sources or from the construction of small storage dams. Up to 1928 some boring work was done by the natives themselves, but on a very small scale. In 1929 the administration endeavoured to improve the position, but very little could be accomplished owing to lack of funds, and up to 1933 government assistance had extended only to the sinking of thirty-six boreholes. Nineteen of these were failures, mainly because efforts had to be directed to finding supplies at settlements and other places known to be unpromising geologically. Sir Alan Pim's Report of 1933¹ on the protectorate emphasized the need for a more energetic programme of boring, preceded by a systematic survey. The geological conditions are sufficiently similar to those of the Union and South-West Africa to allow geologists to make a reasonable forecast of the average depth and quantity of water likely to be obtained by drilling. Several schemes for a gradual and systematic programme of water development were prepared, and in August 1935 a grant of £25,000 was received from the Colonial Development Fund. Some time elapsed before plant and equipment and final surveys were completed, but an organized start was made in 1936. By April 1937 twenty-five boreholes and three wells had been sunk, and four other boreholes and seven other wells were in course of construction, while a dam conserving 370,000,000 gallons of water had been completed and work started on several small-surface contour dams. During the progress of this work a scheme for further development was prepared, and a fresh grant of £144,400 has been made from the Colonial Development Fund to cover the next four years.

¹ *Report on the Financial and Economic Position of Bechuanaland*, Cmd. 4368, 1933, p. 110.

(d) Basutoland and Swaziland

In Basutoland the chief danger is not drought but soil erosion.¹ The Colonial Development Fund has recently provided a loan of £160,000 for anti-erosion works² designed to ensure the even distribution of storm water and its conservation. There is also a need for small irrigation works to utilize water from storage dams and perennial streams in the cultivation of crops and fodder reserves; such works would incidentally supplement the main anti-soil erosion scheme. The Colonial Development Advisory Committee have expressed their readiness to consider a grant for this purpose when the anti-erosion work has progressed further, and the possibilities of such small irrigation works have been adequately surveyed. The Basutoland Government is now making provision in its estimates for an annual sum for the safeguarding and improvement of village drinking-water supplies.

Swaziland, which contains in proportion to its size an unusual number of streams and rivers, would at first sight appear to be well suited for irrigation. Of the three physical sections into which it is divided, the high veld offers few possibilities, but various schemes have at different times been investigated in the middle and low veld areas. In 1927 the Union Irrigation Department made an inquiry into proposals for utilizing the water of six rivers—the Komati, the Usutu proper, the Little Usutu, the Black and White Mbuluzi, and the Ingwavuma.³ The survey was of a preliminary nature, and confined mainly to engineering details. The scheme for the White Mbuluzi was considered impracticable; of the others that on the Little Usutu, in the low veld, seemed to promise some success. It is, however, in Sir Alan Pim's opinion doubtful if it would repay outlay unless developed under conditions of high-priced cropping. Some attempt has been already made at irrigation from the Ingwavuma, but this has so far been rendered unsuccessful by the irregular flow of the river. The scheme considered for the lower Komati was devised mainly in the interests of irrigation in the Union beyond the Swaziland border. It was rejected on account of the danger of alkali, but further

¹ *Report on the Financial and Economic Position of Basutoland*, Cmd. 4907, 1935, p. 143.

² See Chap. XVI, p. 1084.

³ *Report on the Financial and Economic Situation of Swaziland*, Cmd. 4114, 1932, p. 98.

surveys would seem to be justified, for the area contains excellent veld land. The Usutu proper appears to offer possibilities of irrigation near the Lebombo range at Big Bend, but qualified opinion holds that, before embarking on any work involving large capital outlay, some practical experience is required of irrigation carried out in Swaziland conditions, as insufficient material exists on which to base final estimates of the productive capacity of such works. The British Government has not so far made provision for such schemes: if finance were provided for small individual or community projects, they might afford the data necessary to estimate the possibilities of larger undertakings.

There is an urgent need for the construction of small rainfall dams, which have already been tried with success in Swaziland, and the methods adopted by Transkei and other Union reserves might well be followed. An experienced engineer employed by the Union Government has confirmed this view in a recent survey. Boreholes have generally proved a failure in Swaziland.

(e) *The Rhodesias*

No detailed survey of irrigation facilities has been undertaken either in Southern or Northern Rhodesia, though a reconnaissance party was at work in the former area until it was discontinued as an economy measure in 1931. It would not appear that the economic or agricultural conditions in either area are such as to promise success to any scheme involving large capital outlay. In Southern Rhodesia two small schemes in the Umtali District have been financed from loan funds, and a dam on the Mazoe estate, with a storage capacity of 5,000,000 gallons, estimated to command 6,000 acres of land, has been constructed by the British South Africa Company for protection of its citrus plantations. For the most part, however, irrigation must be viewed in the light of assistance to stock-raising, for which the small work, supplying sufficient water for the cultivation of fodder reserves, offers most advantage. The movement which is now taking place towards mixed farming will no doubt stimulate the demand for such schemes. So far projects have been prepared which are estimated to command 63,000 acres; the area now under irrigation is stated to be 20,000 acres.

In certain of the Southern Rhodesian districts, as, for instance, in the more arid areas of western Matabeleland, there is a pressing need for the development of underground supplies for drinking purposes. The state maintains an engineering and well-boring establishment which carries out drilling for farmers on terms similar to those in force in the Union: the cost to the farmer is given at 17s. to 18s. per foot drilled. Figures of the total number of boreholes made do not seem to have been published, but of late years an appreciable increase in activity is reported in the native reserves and purchase areas; by no means all of these undertakings can, however, be said to have been successful.¹ Geophysical prospecting, which has been found greatly superior to the method of selecting sites by surface indications, is being extended, and the administration intends to concentrate upon constructing small storage works, each serving not more than 400 head of cattle.

In Northern Rhodesia official reports have spoken of the need for boring operations in the drier areas. In the native reserves some wells have been sunk and dams constructed, but on the whole the work has been spasmodic and often unsatisfactory.² The total estimated expenditure from loan funds on the schemes is £15,667, apart from smaller amounts from native reserve funds and under the tax relief schemes. In the Southern Province a water-development staff is engaged on surveys and on the supervision of works financed from native reserve funds. Operations in the copperbelt area have given indications of the existence of artesian supplies, which would seem to warrant further investigation.

(f) *Nyasaland*

The question of water supply has received much attention in Nyasaland, where the Geological Survey Department has since 1923 been in charge not only of the surveys necessary, but of the drilling operations.³ The mean annual rainfall of Nyasaland (between 30 and 45 inches) gives it some advantage over areas lying farther south; but the restriction of the rainfall to four

¹ *Report on the Financial and Economic Position of Northern Rhodesia*, 1938, para. 141.

² *Ibid.*, para. 151.

³ Geological Survey Department; *Water Supply Investigation (Report No. 4)*, 1934.

months of the year creates problems in connexion with domestic water supply, which have an important bearing on schemes for the redistribution of population in the more congested areas. The population density for the whole territory is 34·6 per square mile, which is higher than Northern Rhodesia (3·2) or Tanganyika (13·7); and in addition a large proportion is confined to the vicinity of the permanent water of Lake Nyasa or of rivers such as the Shire. In 1930 a grant of £40,180 was made from the Colonial Development Fund. This has resulted in the production of valuable physical maps of Nyasaland with special reference to the existence of water supplies, and the preparation by Dr. F. Dixey of a *Handbook of Water Supply*.¹ By 1935 some 256 wells and boreholes had been constructed, and 481 square miles of land were in process of being opened up by the extension of drinking-water supplies. A further grant of £44,250 was made in 1936 for the continuation of the work during the next five years.

(g) *Kenya*

The possibilities of irrigation in Kenya received some attention in an administrative survey made in 1911, but first came under serious examination in 1925 when the Director of Irrigation in the Union, Mr. A. D. Lewis,² was delegated to visit the colony. His inquiry was directed to the question of the supply of water for stock rather than to irrigation for agricultural purposes; but he was able to indicate that the Tana river offered possibilities for irrigation which might repay further examination. This was not undertaken till 1934, when Messrs. D. G. Harris and H. C. Sampson³ made an expert reconnaissance of the Tana area. They showed that physical and health conditions made it inadvisable to proceed further with the scheme in which the Kenya Government had itself been interested—namely, the development of the lower or deltaic Tana—nor did it appear that the middle Tana was likely to yield a return proportionate to the heavy outlay on head-works involved. A canal on the upper Tana was shown to be technically feasible, with a capital cost of about £2,000,000. But

¹ F. Dixey, *A Practical Handbook of Water Supply*, 1931.

² *Report on Irrigation, Water Supplies for Stock, Water Law, &c., in Kenya*, 1925.

³ *Irrigation Report of the Tana River Expedition*, 1934.

in their view it could be recommended in the first instance mainly as a protection against famine, and as some solution of the overstocking problem, rather than as a productive work; it seemed likely to prove self-supporting only after a considerable period had elapsed. The success of such a scheme does not depend only on engineering conditions; it involves a complexity of novel problems connected with the reaction of the soil to irrigation, the introduction of intensive cultivation, and colonization by native settlers. They therefore recommended that experience should be sought in the development of some smaller scheme, and instanced the Perkerra river in the Kamasia reserve as suitable for the purpose.

This project has two sections, of which the first is roughly estimated to command about 3,000 and the second about 5,000 acres. The scheme would have its own value in the reserve, where scarcity relief has to be given annually, but its character would be that of a protective rather than of a productive work. As a result of this report, the Kenya Government is now proceeding with the detailed survey of the Perkerra scheme. It has been of great advantage to Kenya to have before it an expert view of the economic conditions which must regulate development by river irrigation. It may be noted that there is a small native irrigation system in the West Suk district of the Rift valley, similar to that of the Chaga on Kilimanjaro, though less skilfully organized.

The supply of water for drinking purposes, particularly in some of the native reserves, remains a matter of the first importance. The report of Mr. Lewis had pointed out that about 65,000 square miles of the territory lie in a rainfall area of between 20 and 30 inches, in which the provision of water supplies for stock is an urgent necessity; 93,000 square miles lie in an area of less than 20 inches of rainfall, and with the exception of a few areas held by tribes along the Tana, Sabaki, and Uaso rivers this is almost uninhabited. Drilling was started on a small scale by the government in 1926, and the technical aspects of the work were reported on by Mr. A. Beeby Thompson¹ in 1929. The results of the experience gained between 1926 and 1932 formed the subject of a further report by Mr. H. C. Sikes in 1934.² At that date

¹ *Kenya Water Problems*, 1929.

² *The Underground Water Resources of Kenya Colony*, 1934.

some 174 boreholes had been sunk, at an average depth of 251 feet, of which 63 were unsuccessful. The sum expended by government before the operations were closed down as an economy measure in 1931-2 amounted to £91,125; the charges for the hiring of drills by farmers were based on those prevailing in South Africa, but circumstances, including the early closure of operations, tended to make the average cost higher than in the Union. These operations have now been renewed in certain of the reserves, with the aid of a grant of £42,000 made in 1936 from the Colonial Development Fund.

As in Tanganyika the question of water rights has involved much discussion. The first Ordinance on this subject was 29 of 1929, and in 1936 an amending Water Ordinance was passed in order to regulate the chaotic position previously existing. Hitherto, the use of water supplies had been regulated by the issue of permits conveying no legal rights, but the need for a legal definition of rights is clear. About 1,500 permits had been issued under the old procedure; the recent ordinance will involve a survey and allocation of rights. The problem has come to the front mainly owing to difficulties encountered by settlers, but in the course of the survey native rights will also have to be taken into account.

(h) *Tanganyika*

The Germans were attracted by the potentialities for irrigation offered by the Tanganyika river systems, and in 1909-10 they examined a scheme for the canalization of the valley of the Kilombero, a tributary of the Rufiji.¹ The available information suggests, however, that this area is not suitable for development by irrigation. The valley is subject to flood conditions and malaria would create a serious health problem. It seems suitable for the production both of rice and cotton on flood lands, and under a scheme organized by the Liverpool Uganda Company produced about 2,000 bales of cotton in 1936. Its future development depends on the possibility of improving the general conditions by extension of communications and of health measures; the problem is not actually one of irrigation. An interesting native irrigation

¹ C. Gillman, *Journal of the Royal Geographical Society*, lxi, 1927, pp. 101-21; A. M. Telford, *Report on the Rufiji and Kilombero Rivers*, 1929.

system exists on Mounts Meru and Kilimanjaro. Its precise history is unknown, but a survey¹ made by Sir Edmund Teale and Mr. C. Gillman in 1934-5 showed that though the method used is primitive the channels are well graded and are led for many miles over difficult ground; the distribution is regulated by long-established native law and custom. It would not, however, appear practicable to effect any great extension of the system by conservation of flood waters on the mountain, and the problem presented is that of securing a more economical use of the existing supplies, which are somewhat wastefully used. The report suggested that if irrigation was to be extended, a possible site existed at Nyumba Ya Mawe on the Pagani river, but so far no detailed examination has been made of this project, which is of very doubtful value.

The needs of Tanganyika, however, like those of other East African territories, seem to lie rather in the development of drinking-water supplies for men and cattle than in the construction of irrigation works. Even where river water is available most of the soils commanded are residual and liable to become saline unless costly drainage is resorted to. On the other hand the valuable study of population distribution made by Mr. C. Gillman² shows that two-thirds of the residents of Tanganyika are concentrated on one-tenth of the area, which alone possesses enough water to support them. Many of these 'oases' are approaching congestion. The provision of drinking water becomes of the highest importance in dealing with problems such as that of the prevention of wastage of pasture, and consequent erosion, by the adoption of a system of rotational grazing, or that of the transfer of the population from areas affected by tsetse. So far little progress has been made in drilling boreholes, and there has been a high proportion of failures due to the occurrence of brackish water. It has indeed been suggested that the geological conditions on the whole are less favourable for subsoil water development than in Kenya. In 1931 field work was begun on a scheme of water boring, for which a loan of £10,000 from the Colonial

¹ *Report on the Investigation of the proper Control of Water and the Reorganization of Water Boards in the Northern Provinces of Tanganyika Territory, November to December, 1934.*

² *American Geographical Review*, July 1936. See also *Report to the League of Nations on Tanganyika Territory, 1935.*

Development Fund was approved in February 1930, and the Geological Department, which is now in charge of this work, had between 1931 and 1934 completed fifty-two boreholes at an average cost varying from £280 in 1931 to £139 in 1933. Sixty-nine per cent. of the sites chosen for boring have produced water in adequate quantities. In 1937 the Colonial Development Fund provided £40,430 for a hydrographic survey and reconnaissance of water resources. The majority of the boreholes have been drilled for the sisal industry and the native administrations and railway. In the Lake Province native administrations have provided machine pumps and windmill pumps at boreholes, and have constructed dams, in association with boreholes, springs, or natural catchment areas.

The need for regulation of the native system on Mount Kilimanjaro and of the supplies from watercourses elsewhere, especially those in areas which have been the subject of land grants, has directed attention to the need for amending the law relating to water rights. The present Natural Water Supply Ordinance¹ constituting local water boards is clearly inadequate in the absence of any law defining rights in water. Experience elsewhere seems to suggest that a solution can only be found in claiming for the state the right to control all natural water supplies; it is dangerous to allow a law of water rights to grow up based on English common law.² Mr. F. E. Kanthack, the consulting engineer recently called in by the Tanganyika Government has reported in the same sense.³ The government is now initiating measures for a complete hydrographic survey of Tanganyika, and a grant of £57,570 has recently been made by the Colonial Development Fund towards this survey and for accompanying irrigation experiments and forestry work.

(i) *Uganda*

The survey of water-supply conditions in Uganda by its Director of Geology, Mr. E. J. Wayland, points to the importance of preventing the process of silting up which is overtaking a number of the lakes and rivers. This problem requires further investigation;

¹ *Laws*, cap. 75.

² E. O. Teale and C. Gillman, *op. cit.*

³ F. E. Kanthack; *Report on the Control of Natural Waters of Tanganyika*, 1938.

meanwhile the immediate need is for improved domestic water supplies. Here the needs are local rather than general. Save in the north-east the rainfall averages from 35 to 45 inches, but there are localities where local scarcity prevails owing to seasonal fluctuations in the rainfall. For some years the Geological Department had urged that a hydrographic survey should be undertaken accompanied by experiments in drilling, and in 1930 a start was made with a small boring equipment. By 1935 some seventy-seven boreholes had been drilled of which only forty-six were successful, which seems to bear out the geologist's forecast that large stores of easily-tapped underground water were not to be expected in the protectorate. It is possible that a solution may have to be sought in a better-organized development of rainfall storage by means of dams and tanks.

(j) *Nigeria and the Gold Coast*

In the Southern Provinces of Nigeria the development of water resources is not so urgently required in the interests of agriculture or animal husbandry as in most parts of East Africa; the chief need is for an improved domestic supply in the interests of health. This has in particular been felt in Owerri Province, where in spite of high rainfall there has sometimes been serious water shortage, and the Geological Department has started a well-sinking programme after a geophysical survey for underground water. In the Northern Provinces, where the rainless seven months are accompanied by the drying harmattan, the water supply is of vital importance. The extension of the system of mixed farming, to which agricultural authorities are looking for the expansion of production,¹ depends largely on the water supply; and if water were more readily available it would be easier to redistribute the population in the congested areas of the northern emirates. No schemes for the use of river water on any considerable scale have yet been developed, though use has been made of storage on a small scale at Sokoto.

The possibilities of an extended use of underground supplies were investigated by Mr. Beeby Thompson² in 1933 in the course of a general survey of the water problem of Nigeria. Geological

¹ See Chap. XIII, p. 963.

² *Report on the Water Problems of Nigeria*, 1933.

conditions appear on the whole favourable, and Fulani well-sinkers had already shown much skill in digging wells in some of the northern emirates, though they seldom possessed the technical ability to succeed when any thickness of dry beds had to be penetrated. During the years 1929-33 the Geological Department had sunk some 268 open wells at the relatively low cost of about 10s. a foot. Mr. Beeby Thompson considered that further progress required a better drilling organization than had hitherto been available to the Geological Department; in many parts subsoil water could not be reached by hand-dug shafts. Drive tube wells could be usefully employed in the river valleys and existing shafts improved by boring deeper into the water-bearing beds, suitably screened casing being inserted on the method employed with success in certain areas of Northern India.

Since the date of Mr. Beeby Thompson's inquiry the number of open wells constructed by the Geological Department has steadily progressed, and the total number at the end of 1936 was 941. An examination made in 1934 of the Lake Chad area, which may be defined as the country running north of a line drawn through Bauchi, Potiskum, and Maiduguri, showed that it presented special opportunities for drilling in its promise of sub-artesian supplies.¹ Funds were in 1935 provided for the extension of the water work of the Geological Department, covering a five years' programme at a cost of £33,500, and the drilling equipment necessary to pursue boring operations has now been furnished. The department has made a complete survey of underground supplies in the northern emirates and has made a considerable use of the geophysical method in its survey. The actual cost of making open wells is borne by the native administrations. It may be noted that experiments made in 1933 in lifting water from open wells show that supplies (save perhaps in the river valleys) are unlikely to be sufficient for irrigating crops on any useful scale, as the depth from which the water has to be lifted is too great; the open wells have not so far been found to give a supply at all comparable with those used for irrigation in Northern India, where the average well worked by a Persian wheel is estimated to yield about 5,625 gallons an hour. The

¹ C. Raeburn and B. Jones, *The Chad Basin: Geology and Water Supply*, 1934.

main benefit appears to lie in the assistance given to mixed farming and the stabilization of agricultural conditions.

In the Northern Territories of the Gold Coast the water problem resembles that of Northern Nigeria, and the development of agricultural production would seem to depend mainly on the expansion of drinking-water supplies. A survey of the area has been made by an officer of the Geological Department; the number of new wells considered necessary in the Northern Territories and in Togoland under British mandate is 2,001, and the number of dams 56, and it was recommended that £2,500 should also be provided for cleaning and repairing existing ponds and water holes.¹ A Water Department has now been formed and expenditure of £7,000 was provided for 1937; the programme of work will probably extend over six years. There exists near Pong Tamale an interesting series of underground water reservoirs (belligers) excavated by natives in the impervious strata below a hard layer of laterite concretions; assistance given in their clearing and maintenance would be of considerable benefit to the local population.

(k) *The French Territories*

The French West African authorities, in dealing with the water problems of their territory, have been accustomed to divide it into five climatic zones running transversely from west to east, the most northern being the Sahara, followed by the Sahel, the Sudan, the Guinea, and, lastly, the Forest zone in the coastal area.² Both soil and climate appear to rule out any possibility of improving water supplies on an effective scale in the Saharan zone, while in the Guinea and Forest zones the problem is mainly that of improving supplies for health reasons. In the Sahelien zone, however, which lies north of a line drawn roughly between the Casamance and the centre of Dahomey, water problems have an important bearing not only on agricultural production but on the distribution of the population.

The possibility of irrigation from the rivers in Senegal has for

¹ W. G. G. Cooper, *Report on Investigation into the Water Supplies of the Northern Territories of the Gold Coast*, 1937, p. 21.

² *Le gouvernement général de l'Afrique Occidentale Française*, Exposition coloniale internationale, 1931.

some years been the subject of a special study centring on storage projects on the Baoulé and Bakoy, and these will be followed by an investigation of possible sources on the Bafing and Falémé.¹ At this moment, however, the chief interest is concentrated on the important irrigation enterprise undertaken in the French Sudan with a view to the development of the Niger basin. The project is largely due to the initiative of M. Bélimé,² who began his investigation of the area about 1920. The hydrography of the central section of the Niger presents features of singular interest. In the course of its great northward bend the river floods an enormous delta of its own building, the area of inundation being estimated at nearly 40,000 square miles. A series of vast but shallow depressions, including Lake Debo, are filled during the flood season and gradually dry up as the river falls again. These conditions continue to the neighbourhood of Timbuktu, where the river resumes a normal régime, but so great is the effect on the Niger of this dispersal of its waters, that high water does not arrive in British Nigeria till twelve months after the fall of the rains on the head waters of the river in French Guinea. The scheme for developing the Niger lacustrine area was originally inspired by the hope of supplying the French markets with cotton, but it also found some support as a link in the project for the Trans-Saharan railway. The prospects of the railway scheme, however, must stand or fall on its military value; the Niger river already provides a ready means of transport for the products of the Niger basin to the sea coast. The lack of an adequate resident population and ignorance of soil conditions indicated the need for some caution in approaching any major scheme of irrigation, and the French Government began its study of the problem in 1922 by utilizing the cotton research station of Niénébalé, 110 miles below Bamako, as an experiment in colonization; it has now a well-established population of about 1,500.

A more extended experiment of this kind was made in 1931 on the Sotuba canal near Bamako, which had originated in 1925 as a combined project for the provision of hydro-electric power and a navigation channel to avoid the rapids on the Niger. The

¹ J. Brévié, *Discours à l'ouverture de la Session du Conseil de Gouvernement*, 1933, p. 98.

² See *Rapport sur le fonctionnement de L'Office du Niger*, 1935.

total cost was 20,000,000 francs, of which one-half represents the cost of the canal, which commands an area of about 21,250 acres. After a period of initial difficulties the scheme has begun to attract colonists, and there is now a population of 5,500 persons, mostly of local origin.

The major Niger irrigation project, which has its headworks near Sansanding, was approved in 1931. The barrage, of a total length of 5,981 feet, including a mobile barrage of 2,640 feet, will be completed in 1941, but the two main channels, the Macina and Sahel canals, will be ready at an earlier date and have already been utilized in 1935 and 1936 for irrigation by flood water. The project has involved the construction of an embankment of nearly forty-four miles in length extending as far as Macina, in order to protect from flood action the lands lying below the left bank of the Niger. Irrigation will be developed in stages, the first being estimated to command some 597,241 acres; the total area estimated as under command is 2,372,166 acres, but this includes, in addition to the irrigated lands, a considerable area benefited by seepage. The cost of the main engineering work up to the first stage is estimated at 300,000,000 francs or (at the rate prevailing before devaluation) £3,750,000; the secondary works will probably require the expenditure of an equivalent sum. Since 1932 work on the development of the Niger basin as a whole, including mining surveys and the general improvement of agriculture over a wide area, has been entrusted to a special state organization, the *Office du Niger*, with M. Béline as Director-General, and the development expenditure on the Sansanding scheme forms part of this general account; some share of the development will fall also on the revenues of the colony, which has already assumed responsibility for the protective embankment and some of the experimental farms.¹

It is not possible at this stage to forecast the financial returns of the Niger schemes. Experience at Sotuba and that gained in the somewhat similar conditions of the Gezira project in the Anglo-Egyptian Sudan have shown that native colonization, if conducted by gradual stages, need not present the difficulty which

¹ For the Niger Scheme, see *Premier congrès soudanais de technique et colonisation africaines*, 1936, vol. ii, pp. 114; S. H. Frankel, *Capital Investment in Africa*, 1938, Chap. V, sec. ii.

was once anticipated on account of the local shortage of population. The experience of the Diré Company, which has had since 1919 an agricultural station at Goundam, leads to the same conclusion; there is at Goundam a native colony of 320 families, which it is hoped to increase shortly to 700. Only part of the area commanded by the Sansanding scheme is suitable for cotton and about half the area will be devoted to rice, of which Senegal imports in certain years nearly 80,000 tons from Indo-China. Every credit must be given to the *Office du Niger* for the careful preliminary investigation which it has made of all soil and agricultural conditions, but there remain factors which can only be tested by further experience. It is a characteristic of African soils that they are easily exhausted and require regeneration by long fallowing or artificial fertilization. It is noteworthy that the Gezira scheme, with its full command of Nile water, began with a three-year rotation of cotton and has had to fall back on a four-year rotation. The *Office du Niger* has conducted experiments with apparent success in both green-manuring and artificial fertilization, but it still remains to be seen how far the Niger basin soils will react over a period of time to continual cropping, especially in the hands of a population hitherto inexperienced in agriculture. The loan funds from which the work is being constructed carry a high rate of interest ($5\frac{1}{2}$ per cent.) and delay in development will lead to a proportionate accumulation of interest charges.¹ The work is so important that it is to be hoped that the Government of French West Africa will give to other administrations the benefit of a full statement of the progress made, accompanied by a capital and revenue account and figures of 'duty' and cropped area, compiled on a basis which will allow comparison with similar works elsewhere.

Elsewhere in the Sahelien and Sudanese climatic zones of French West Africa the main problem, like that of Northern Nigeria, is that of stabilizing and extending agriculture by drawing on underground water supplies for the provision of drinking water. The French authorities, acting through the local *sociétés de prévoyance*,² have of late years largely increased the cultivation of groundnuts by constructing open wells for drinking-water, and have thus been

¹ See Chap. XX, p. 1451.

² See Chap. XXI, pp. 1477-80.

able to effect a redistribution of the population in part of Senegal in order to relieve soils which have shown exhaustion from the continuous cropping of ground nut. The *sociétés de prévoyance* have been utilized for the same purpose in the French Cameroons. In the northern areas of French Equatorial Africa preliminary studies have been made into the possibility of using the Logone and Chari rivers for irrigation, but with this exception no measures calling for notice have been taken to deal with the problem of water supply. The territory has a large river system in the Ubangi, Congo, and Gabon Provinces, but the rainfall conditions in these areas have been held to make it unnecessary to consider the construction of irrigation works.

III. FUTURE LINES OF DEVELOPMENT

The facts to which the preceding paragraphs have made reference seem to show that in the present conditions of Africa, large-scale irrigation undertakings are likely to prove of less value to general development than smaller works auxiliary to agriculture or stock-raising, or the provision of drinking-water supplies from underground sources or the storage of rainfall. There are many areas in which inadequate attention would seem to have been paid hitherto to the need of the latter provision. The use of loan capital for the development of smaller works, such as a borehole, well, or small rainfall storage dam, is restricted since, unlike the larger irrigation work, they cannot give a direct return to capital outlay, and in many areas a considerable percentage of drilling failures is to be expected. It is, however, indirectly productive, and some part at least of the interest charges would be met by the resulting increase in general taxable capacity. In French West Africa it has been found that the *sociétés de prévoyance* are able to meet from the extension of cultivation rendered possible by well-sinking the service of loans advanced by the *Crédit Agricole*. It is, at all events, clear that the extension of drinking-water supplies in semi-arid tracts has claims on the available resources of the African territories which are certainly not less than those of medicine or education as a measure conducing to the promotion of native welfare.

IV. THE DEVELOPMENT OF MAJOR IRRIGATION WORKS
BY PRIVATE CAPITAL

The difficulty arising from the engagement of state finance in major irrigation undertakings has given occasion to the question whether they cannot be suitably developed by the aid of private capital. Their management, however, involves matters so vital to those who become dependent on them that the governments in Africa may well share the objection which has been felt in India against entrusting them entirely to private control, and this is likely to be all the stronger when cultivation is in the hands of Africans. In a situation in which the land is of little use without the water, the control over water differs little from proprietorship over the land. For this reason many have preferred to advocate systems in which development is shared between the state and private capital.¹ The small settlement at Diré mentioned above, though nominally of this class, is hardly in point, since the state has no effective share in the enterprise, but the Gezira scheme in the Anglo-Egyptian Sudan provides an illustration of development which has been described as a tripartite partnership of the state, private capital, and the cultivator, the study of which may be of value to other administrations. Construction began in 1913 in circumstances which resulted in a far higher capital charge than would have occurred under normal conditions: though no regular capital and revenue accounts have been published the cost of the canal and connected works may be taken at nearly £14,000,000. The commanded area was in 1937 estimated to be a little over 800,000 acres, which on the four-year system of rotation now in force gives an area under cotton, the only productive crop, of about 200,000 acres. Possession of the necessary land was obtained under a land ordinance by which the state took over all rights on long lease subject to a fixed annual payment to right-holders. The capital cost of the work, except that of subsidiary canalization, was borne by the state, which also bears the annual outlay on the maintenance of irrigation. The granting of tenancies to cultivators and the management of the cultivation have been entrusted to the Sudan Plantations Syndicate, which maintains a

¹ See H. M. Leake; *Studies in Tropical Land-Tenure*, 1933.

large European technical and supervisory staff. It markets the cotton crop and the proceeds, after deducting its charge for ginning and marketing expenses, are now divided in the proportion of 20 per cent. to the Syndicate, 40 per cent. to the government, and 40 per cent. to the cultivators. The mechanical ploughing for the cotton crop is carried out by the Syndicate, which also supplies seed, but these charges are recovered from the cultivator, who provides at his own cost all other labour involved such as weeding, picking, and clearing watercourses. The conditions of tenancy lay down that he must devote a prescribed part of each holding to subsistence crops, but no recovery is made if canal water should be used on their cultivation. The system gives a high measure of efficiency in cultivation, yielding a high-grade and uniform product which commands a specially good price in the cotton market; it is doubtful if the Sudan administration could have attained the same results without the aid of the Syndicate, which had previous experience of cotton-growing on the pumping stations in the Sudan, and whose large staff has shown itself as capable in the administration of the tenancies as in the technical aspects of cultivation. The cost of management—namely, the 20 per cent. of proceeds retained by the Syndicate—though undoubtedly high, represents the sum paid for an organization which has been of great value in the development of the Gezira; but it is a matter for consideration whether this could not now be reduced by a larger employment of a native trained agency. From the cultivator's point of view it may be said that the conditions have been adequate to attract and retain a sufficient number of tenants; it may be noted that in 1935 about 75 per cent. were local inhabitants or their nominees, 6 per cent. were from the western Sudan, 2 per cent. from Nigeria, 9 per cent. from French Equatorial Africa, and 3 per cent. from other sources. They are adequately secured in the growth of subsistence crops, and in a year of average cotton prices each holder would appear to receive an average yearly sum of £20 to £40 in cash from his share of the cotton, but from this he has to pay the cost of any labour which his family cannot supply. In the years of reduced cotton prices following the general depression the cash returns were reduced to a figure which left the tenants with a considerable debt to the Syndicate on account

of ploughing and seed and subsistence advances, and these had to be written off by it with the assistance of government. The tenants are materially better off than their neighbours, who still depend largely on grazing and the cultivation of inferior subsistence crops, but their position as tenants under a close supervision does not give them the same sense of stability, or the same interest in their holdings, as is secured by the conditions of tenure in the somewhat similar undertakings in India. It is only fair to add, however, that tenants on the Gezira have come to the settlement with a very different background and with a lower capacity as colonists than the Indian cultivator, while, as shown above, many of them come from other territories and would not in any case be permanent settlers.

CHAPTER XVI

SOIL EROSION¹

I. TYPES AND EFFECTS OF EROSION

It is only in the last few years that soil erosion has become recognized as one of the major problems facing the governments and peoples of most African territories, and as a problem which is growing yearly more acute. This is not to say that erosion is in itself a new factor. On the contrary, it has been going on since the world began; it is the process by which soils are formed from the parent rock, and by which the topography of the earth is moulded. The problem which Africa has to face arises from the acceleration of the normal rate of erosion by reason of the activities of man. It is in this sense of accelerated erosion that the term 'soil erosion' will be used in this chapter.

Erosion, in this sense, may be defined as mechanical changes in the soil, brought about by the agencies of wind and water. These changes follow upon and themselves accelerate the destruction of the vegetal covering normally protecting the earth's surface, and this destruction of vegetation, be it forest or grass, is the essential cause of accelerated erosion. The natural tendency of the earth is to cover itself with a protective shield of vegetation, whose composition is determined by conditions of soil, rainfall, and climate. For every part of the earth's surface there is a final stage of equilibrium between the vegetation and its environment, known to ecologists as the climax, which will be reached by the vegetation, provided that it is left free to develop. The intervention of man frequently upsets this delicate balance, and reverses the order of plant succession. African rain-forests, for instance—a climax type of vegetation—rarely recover from cutting or burning, but are usually replaced by park-like forest of a lower ecological type, sometimes called savannah. This savannah forest, in turn, may be reduced by frequent burning to a sparsely bush-clothed veld. Finally, overstocking and the continual grazing and trampling by cattle may so weaken the grasses that they succumb to drought, and the veld is then transformed into desert practically devoid of vegetal cover.

¹ This chapter was largely drafted by Mrs. Elspeth Huxley.

It is at this stage that erosion through the agencies of wind and water becomes acute. Vegetation normally protects the soil from the impact of falling rain, facilitates the percolation of rain water into the subsoil levels, takes up surplus moisture in its foliage, reduces the rate of evaporation, and shields the surface of the soil from wind. Its removal bares the earth to the direct impact of rain and wind, and to the drying action of the sun. These three elements may then in a very short space of time strip the mature topsoil wholesale from the earth's surface and remove it as silt in rivers or as wind-borne dust. This leaves exposed the sterile subsoil, sand or rock, incapable of supporting those types of plant life which can be utilized by man or his animals. In extreme cases the process may go so far that it becomes, like certain chemical reactions, irreversible: that is to say, nothing that man can do will restore the fertility of the land. This destruction of soil fertility, the most spectacular result of erosion, is the end product. The earlier stages are far more widespread and constitute the more serious problem; for in these earlier stages erosion can still be checked.

There are, broadly speaking, three types of erosion: sheet, gully, and wind. The first is the most widespread and dangerous, for it can proceed to a considerable length before any change becomes apparent to the eye. The primary cause is the cultivation of land on slopes without the use of terraces or other preventive measures. This form of erosion occurs to a greater or lesser extent on all slopes when the soil is left exposed and heavy storms are experienced; the tendency to it is increased where shallow ploughing has resulted in a hard pan a little below the surface; its severity varies with the type of soil and with the steepness of the slope. The first effect, which usually goes unnoticed, is the removal of the finer soil particles in suspension, leaving the coarser particles behind. These finer elements in the physical structure of the soil fill an important function in helping to bind soil particles into crumbs, upon whose size the quality of the tilth and the capacity of the soil to retain moisture and soluble plant food largely depend. Their removal leads to a deterioration in the capacity of the earth to support plant life. The coarser residual soil, moreover, leaches readily, and stores of humus rapidly become exhausted.

In more extreme cases the topsoil may be stripped bodily from the slopes and carried into the rivers by heavy storms. It is computed that many areas in the highlands of Nyasaland are losing soil at the rate of a quarter of an inch a year.¹ In Kenya an instance of the loss of 12 inches of topsoil in a year has been noted, and in one case an inch of soil was removed from a maize field in a single storm.² While sheet erosion is generally associated with cultivated land on hill-sides, it may also affect badly denuded grazing land in undulating plains; for example in Karamoja, in the Eastern Province of Uganda, observers have commented upon 'a vast sheet of muddy water rapidly moving over the surface of the country'.³

Gully erosion is more obvious, and frequently follows sheet erosion. When no vegetation is present to impede the flow of storm water, that proportion of rainfall not absorbed by the soil finds its way downhill in a series of rivulets whose channels are widened and deepened by every downpour. A vicious circle is set up. As the channel grows wider and deeper, the quantity and velocity of the water which pours down it after each storm grows also; and the power of the torrent to tear soil from the sides and bed of the gully is correspondingly increased. Gullies not infrequently start as small creases in the surface of a ploughed field and develop within a few years into chasms 20 or 30 feet deep. In the United States it is estimated that 13,143,000 acres have been destroyed by gully-ing.⁴ Almost any channel or track is liable to develop into a gully; in Africa roads, railways, and paths made by stock going to water or to their kraals are particularly dangerous. In South Africa and Basutoland this form of erosion has become particularly severe. Loss of soil is increased by the cutting back not only of the main channels but of tributary gullies, known in South Africa as sluits, which then spread outwards from the heads of the gullies as small lateral channels.

Both sheet and gully erosion are brought about by the action of water. A third form is that resulting from the action of wind.

¹ A. J. W. Hornby, *Denudation and Soil Erosion in Nyasaland*, Nyasaland Department of Agriculture, Bulletin No. 11, 1934, p. 9.

² G. V. Jacks and R. O. Whyte, *Erosion and Soil Conservation*, Imperial Bureau of Soil Science, Technical Communication, No. 36, 1938, p. 95.

³ E. J. Wayland and N. V. Brasnet, *Interim Report on Soil Erosion and Water Supplies in Uganda*, 1937, para. 90.

⁴ *Report on National Planning*, National Resources Board, 1934, p. 171.

Open treeless plains, where no obstructions break the force of the wind, are particularly susceptible. In their natural state such plains are generally protected by grass cover, but when this grass is removed, either by cultivation or by over-grazing, wind erosion may strip the topsoil from the land. The most striking recent examples of this have occurred in the United States, where dust storms have robbed millions of acres of the great plains of their topsoil. In Africa dust storms have not yet developed on a large scale, but wind erosion is a factor of growing importance. The harmattan of West Africa carries with it sand particles from the Sahara and may be a factor in the spread of desert conditions in Northern Nigeria.¹ In north-western Kenya the recession of the waters of Lake Rudolph has left stretches of fine sand now being deposited over the land by the strong south-easterly wind which blows for a large part of the year.² So-called dust-devils, harmless enough when vegetation protects the earth, occur frequently in many parts of Africa, and, as cultivation extends, their significance as removers of topsoil cannot fail to increase.

The harmful effects of these three forms of soil erosion do not cease with the removal of the topsoil on which plants depend for their biochemical nourishment and physical support, and with a consequent decline in crop yields and in the carrying capacity of pastures. Erosion has several secondary results, of which the most important are: the silting up of dams and reservoirs; the escape of a large proportion of the rainfall as surface run-off before it can be utilized by plants; and a consequent fall in the level of the ground water-table, leading in turn to seasonal flooding and to the drying up of rivers.

Most of the topsoil that is moved downhill by sheet and gully erosion sooner or later reaches a river and is ultimately washed out to sea or into one of the great inland lakes. The Yellow River in China is said to transport 2,500,000,000 tons of soil every year.³ South Africa is said to lose some 187,000,000 tons of silt annually to the ocean.⁴ Rivers which have overflowed their banks regularly

¹ See below, p. 1103.

² A. M. Champion, 'Physiography of the Region to the West and South-west of Lake Rudolf', *Geographical Journal*, vol. lxxxix, no. 2, 1937, pp. 97-118.

³ See G. V. Jacks and R. O. Whyte, op. cit., p. 58.

⁴ *Final Report of the Drought Investigation Commission*, U.G. 49, 1923, p. 66.

for centuries, as, for instance, the Nile, or many of the great rivers of India, have deposited much of their load on the land, and built up rich alluvial soils; where, however, the load of silt is greatly increased by cultivation of hill-sides in the watershed, and where rivers are confined in their course owing to the depth of their valleys, the silt is carried out to sea. If, in its downward journey, it encounters reservoirs and dams, some of it is deposited, and the structure which was built to hold water rapidly fills with earth. This silting up of reservoirs has become a serious problem in the United States¹ and Australia,² and the same problem has already arisen in Africa. The loss of capital which follows the silting up of reservoirs is, of course, enormous; and more serious still is the consideration that, where reservoirs are built to store water for irrigation,³ the future of the whole irrigation project may be endangered. In India it has long been recognized that the chief argument for the reservation of the forests in the Himalayas is the necessity for the conservation of the sources of the great Punjab rivers and of the Ganges.

Soil erosion reduces the proportion of the rain water which penetrates into the soil and becomes available either for the support of plant life or for the replenishment of springs and wells; it increases the proportion which escapes into the rivers as 'surface run-off'. In Africa, where rainfall is so often the limiting factor in agriculture or stock-raising, this aspect deserves special consideration. Effective rainfall is that part of the total precipitation which is absorbed by the soil; that which escapes either by evaporation or as run-off is wasted. The rate of evaporation is everywhere high in Africa, and if losses by surface run-off are added to losses by evaporation,⁴ it will be seen that figures of total rainfall there are apt to be very misleading. As will subsequently be shown, the South African Drought Investigation Commission of 1923 did not believe that the annual rainfall was decreasing, but held that its effectiveness had decreased, since a larger proportion was being lost to the soil through increased surface run-off.⁵

Surface run-off increases where vegetal cover is reduced, since

¹ H. M. Eakin, *Soil Conservation Service Report*, 1935.

² Statement by State Rivers and Water Supply Commission in *Melbourne Age*, Sept. 22, 1937.

⁴ See Chap. I, p. 14.

³ See below, p. 1081.

⁵ See below, p. 1080.

obstacles no longer impede the flow of water, and the soil is no longer kept open and porous by the roots of trees and plants. By far the most efficient type of vegetal cover is deep-rooted natural forest, where run-off is often negligible. Grass, while less efficient than forest, is still much less wasteful than the majority of annual crops, for the run-off may be considerable when the land is left bare and trampled after harvest. Unless preventive measures are taken, a higher rate of surface run-off normally accompanies an increase in cultivation, and there can be no doubt that in Africa a bigger proportion of the rainfall is reaching the sea unutilized than was the case a century ago. To this extent, therefore, the severity of the droughts from which Africa so often suffers has been increased by man.

Springs and wells are fed by reserves of water stored in the sub-soil or rock underground. If these reserves dwindle, then wells dry up, springs are reduced to a trickle, and rivers that once flowed strongly all the year round fail altogether during dry periods and run only during and immediately after periods of rain. The more water lost as run-off, the less is available for underground storage: one of the most serious effects of increased surface run-off, therefore, is a fall in the level of the ground water-table. Such falls have been observed, and to some extent measured, in many parts of the United States;¹ in Africa the same phenomena of falling water-tables and dwindling rivers exist, although accurate measurements appear to be lacking. Examples of rivers which flowed all the year round twenty or thirty, or even ten years ago, and now consist of a chain of waterholes in dry weather and a muddy torrent in wet, have been quoted from almost all African territories. Apart from the Saharan examples,² the cause of which is a subject of some contention, there are many others. Dr. Robert Laws has listed twenty large streams that have ceased to flow in the Mombera District of Nyasaland since he first took up his residence there, nearly fifty years ago. The level of lakes in Uganda is steadily falling, especially Lakes George, Edward, and Kioga,³

¹ W. R. Chapline, 'Range Research in the United States', *Herbage Reviews*, vol. v, no. 1, 1937, pp. 1-13.

² E. P. Stebbing, 'The Threat of the Sahara', Extra Supplement, *Journal of the Royal African Society*, May 25, 1937, p. 7.

³ V. E. Fuchs, *Report of Cambridge Scientific Expedition to the East African Lakes, 1930-1.*

and in Kenya many once perennial streams have now become seasonal.¹

A corollary to the dwindling of rivers and streams during dry seasons is the increase of flooding in wet seasons. Storm waters, no longer checked by forest and bush, flow down gullies and hill-sides into the river-beds; and streams, suddenly swollen, become converted from feeble trickles into rushing torrents heavily charged with silt. It is now an accepted thesis that such flooding is greatly augmented and in some cases caused by deforestation of the watershed. In France, for example, the correlation between floods and deforestation has been demonstrated in the Savoy region. Between 1738 and 1912, 21 per cent. of the forests of this region were destroyed; and whereas during the eighteenth century only eight floods occurred in the area affected, in the nineteenth century the number of floods rose to thirty-eight.² It is at the time of such flooding that irreparable damage is done by the removal of soil in the form of silt. Evidence from many parts of Africa points to the fact that within the last twenty or thirty years such sudden floods, which often subside as quickly as they arise, have become more numerous and more extreme.

The question of a falling water-table needs special consideration in view of the fact that in many parts of Africa action is being taken, by the sinking of new boreholes, and the deepening of existing wells, to extend the water supplies available to man and beast; and indeed it has been suggested that a part of the solution of the overstocking problem lies in opening up new areas for grazing by the provision of wells.³ It is obvious that if the demands made on the underground water-store increase while available supplies continue to shrink and recede, wells provided by governments at considerable cost, with the idea that they will constitute permanent sources of supply, will afford only temporary relief, and will indeed create an even worse position. Catchment tanks and dams might be preferable to wells, as being cheaper and easier to construct and maintain.

Soil erosion leads to chemical changes in the soil too complex to

¹ H. L. Sikcs, *The Underground Water Resources of Kenya Colony*, 1934, p. 10.

² A. Magnein, Communication read to the Upstream Engineering Conference, Washington, D.C., 1936, p. 228.

³ Sir F. Stockdale, *Report on his Visit to East Africa*, C.A.C. 345, 1937, pp. 88 ff.

be dealt with here, but all tending in one direction: to reduce fertility of the soil and so to impair its efficiency as a supporter of plant life. This, in turn, can have only one result, the reduction of the capacity of the land to maintain human or animal life. This point needs special consideration in Africa, where other factors may be causing, in many areas, a rapid increase in both human and animal populations; in parts of the continent the demands of population are already throwing such a strain on the land that its productivity is actually declining. It has been noted, for example, that in Northern Nigeria, on the fringe of the Sahara, 'the whole population is actually increasing whilst the means of supporting it are obviously and visibly decreasing'.¹ The highlands of Nyasaland are stated 'now to be incapable of supporting one half of the population that they did one hundred years ago'.² The same story can be told of many other parts of Africa, from the Sahara to the Cape; and in all cases the stripping of vegetal cover from the land, either by cultivation or by grazing stock, is one of the causes.

II. CONTROL OF EROSION

Excessive soil erosion can, fortunately, be remedied. Since the destruction of vegetal cover is the prime cause, the restoration of such cover is the most obvious remedy. Reafforestation is now regarded as essential for the protection of soil and of head-waters on steep slopes, especially in watershed areas. Actual replanting is expensive, and few administrations can afford it; but results of great value can be obtained by a closure sufficient to allow of a process of natural growth, even if it be of a 'secondary' nature. Protection of existing forests, now practised to some extent in all African territories, is a recognition of the essential part which forests play in the stabilizing of soil fertility, water supplies, and climate. The proportion of Africa's land surface under forests is, however, dangerously low, being less than one-third of the extent considered by experts to be the ideal, which is usually taken to be 30 per cent. though some officers would accept 25 per cent.³ On level or undulating land where protection from forests is not essential, it

¹ E. P. Stebbing, 'The Encroaching Sahara: the Threat to the West African Colonies', *Geographical Journal*, vol. lxxxv, no. 6, 1935, p. 609.

² A. J. W. Hornby, *op. cit.*, p. 8.

³ See Chap. XIV, p. 1000.

may still be necessary to provide a cover of grass if the soil is to be retained. But to restore the natural vegetal cover to all parts of the earth's surface threatened by erosion would mean the withdrawal from cultivation of large areas of agricultural land. This is obviously an impracticable course. The problem of the soil conservationist is therefore to devise means whereby agriculture and stock-raising can be carried on in regions susceptible to erosion without causing permanent damage to the soil. It is proposed here to review briefly those methods which have been devised and found to work satisfactorily.

(a) *On Cultivated Land*

The most ancient, universal, and effective method of increasing absorption and reducing run-off on cultivated land is the use of terraces. The origin of the terrace is lost in antiquity, but its use in Japan, China, the East Indian Archipelago, and the Mediterranean countries has enabled agriculture to be carried on, and large populations to be supported, in regions where erosion would undoubtedly have reduced the rich hill-sides to infertile rocky slopes within a few generations had no such measures been taken. Terracing is most highly developed in countries where rice is the staple crop.¹ In Africa, although rice is indigenous,² terracing (except where recently introduced by Europeans) is almost unknown, though the Chaga on Mount Kilimanjaro make use of it, and on Ukerewe Island, in Lake Victoria, an elementary form is practised. In recent years there have been developed methods by which the principle of terracing can be fitted into modern systems of farming at a very much lower cost than that of the traditional narrow-base structures, known as bench terraces, whose demands on labour are extremely exacting. The simplest of these methods is the construction of small earthworks, in the form of ridges or banks, which follow the contour of the slope and arrest the flow of water and the drift of soil. A somewhat more elaborate structure is the broad-base terrace, of which the Mangum terrace now widely used in America is a form. This requires the use of simple levels in addition to various specially adapted farm imple-

¹ J. Thorp, 'Soil Erosion in China', *Journal of Association of Chinese and American Engineers*, vol. xvii, no. 4, 1936, p. 183.

² See Chap. XIII, pp. 894-5.

ments for its construction; but, once built, it is a permanent and efficient structure. Cultivated land which is contour banked or broad-base terraced must thereafter be ploughed along the contour, which is in itself a minor preventive measure against erosion.

Apart from these and other variations of terracing, several simple anti-erosion measures have been devised. One such measure is the planting of narrow strips of a soil-binding crop (e.g. lucerne, clover, beans, Sudan grass, &c.) at intervals along the contour of the slope, the main crop being grown in between such bands of wash-resistant vegetation. This is known as strip-cropping. Another is the use of cover crops sown, as a rule, shortly before harvest in order to ensure that the land shall not be left without some protective vegetation after the main crop is removed. Other methods of avoiding erosion involve alterations in the basic system of farming designed to increase the humus content of the soil, and to reduce the period during which the land is left bare of vegetal cover.

It is now a commonplace of agricultural practice that the restoration to the soil, in the form of artificial fertilizers, of those elements taken from it by plants, is not enough to maintain fertility, however carefully the chemical loss may be made good. Without the addition of humus derived from organic matter, the land 'loses heart', the tilth deteriorates, and the soil's capacity to absorb and to retain moisture becomes seriously impaired. In this condition it falls an easy prey to erosion. An important factor in conservation, therefore, is to maintain the humus content of the soil. It is probably true to say that if there is one panacea which conservationists would like to see more generally applied than any other, it is the spread of mixed farming. This system ensures that a fair proportion of any given farm shall be kept under grass cover, and provides the means, in the form of manure, for maintaining the humus content and the physical condition of that part of the farm which is cultivated. If a grass ley is rotated with crops, moreover, the system ensures that every part of the farm in turn shall be rested, and its humus content restored.

Attempts are being made to introduce mixed farming in parts of Africa.¹ Where mixed farming is impracticable—as, for instance,

¹ See Chap. XIII, pp. 960-3.

in parts subject to severe animal diseases—humus content may be maintained by the addition to the soil of green manures or of compost. Green manuring with leguminous crops only proves effective in regions where rainfall is fairly well distributed; in regions of low and rigidly seasonal rainfall the ploughed-in crop does not break down satisfactorily. In these areas the break-down of organic matter—in this case crop residues, weeds, and waste material of all sorts—can best be effected not in the soil but outside it, in compost pits or heaps; the resulting humus, in a fine state of division and ready for use by the plant, is then applied to the soil. Adaptations of the method of humus manufacture in compost pits devised by Sir Albert Howard at Indore,¹ by which plant and other residues which would otherwise be wasted are put to good use in helping to maintain soil fertility, are being examined in several parts of Africa. In Kenya, for example, a District Officer has evolved a simplified system for the native farmer,² and the Agricultural Department has conducted a campaign in favour of a compost pit for every village.

(b) *On Pastoral Land*

Erosion on pastoral land is a result of the destruction of grasses by over-grazing, by trampling, and by veld fires. The remedy is to devise and apply a system of veld management which will adjust the numbers of live-stock to the capacity of the land to maintain them, and give the grasses a chance to re-seed themselves at suitable intervals. In working out such a system, the first step where possible is a survey to determine the carrying capacity of the land. This will vary greatly, not only in different years, but as between the dry and rainy seasons of each year. The next step may often be, therefore, to classify areas as dry- or wet-weather pastures, and to arrange for a rough system of rotational grazing between the two, which will give each area intervals of rest when the grasses can set and shed their seeds.³ Pastoral tribes, in their natural state, had worked out some such rough system for themselves, but often it broke down with changes brought about by

¹ A. Howard, and Y. D. Wad, *The Waste Products of Agriculture*, 1931.

² A. D. Hall, *The Improvement of Native Agriculture*, 1931.

³ See Chap. XIII, p. 971.

European rule; a well-known instance is that of the tribes in British Somaliland, where each tribe used at one time to have its own dry-season grazing ground, or *jilal*, which it guarded at the point of the spear.

The distribution of water has a vital bearing on the question of grazing control. Where rivers are few and far between and wells widely scattered, grazing is confined to belts on both sides of the rivers and to circles, centred on wells, whose radius cannot exceed the distance a beast is able to travel without water. In some regions, therefore, large areas of pasture in between these grazeable circles, and beyond the grazeable strips bordering the rivers, are useless for stock. In those regions the provision of new wells would release hitherto sterilized pastures for the use of stock.¹ Another factor which leads to the over-concentration of stock is the herding of cattle into kraals or *bomas* at night. The grass both within these enclosures, and on the tracks leading to them, is then totally destroyed, and the bare patches which result often act as foci of wind erosion. The substitution of a system of paddocking for that of kraaling is therefore one essential method of erosion control. Attention was first called to this question by the South African Drought Commission, which recommended a campaign to extend the use of fences, proof against jackals whose depredations are largely responsible for the custom which prevails in the Union of kraaling sheep.²

The control of fires is an essential part of veld management. Since time immemorial, pastoral natives have fired dry grazing in order to promote the growth of young green shoots; European graziers adopted the custom and often became its strongest supporters. Perpetual burning weakens or destroys the roots of grasses and plants, increases run-off, destroys organic matter in the soil, and hastens the progress of soil desiccation and erosion. It is particularly dangerous near the head-waters of streams, where devegetation leads to shrinkage of springs and to flooding after storms. The matter has been studied carefully in South Africa. The Drought Commission considered that 'the ultimate goal should be to stop all veld fires', but concluded that this was

¹ See Chap. XV, p. 1052.

² *Final Report*, op. cit., U.G. 49, 1923, p. 41, and see below, p. 1080.

impossible, and that steps should be taken to discourage them, and to encourage tree planting. Later studies¹ have suggested that total abolition may not always be desirable, since veld burning destroys ticks and in some areas (e.g. Natal) suppresses coarser grasses which mark the first stage in a plant progression towards scrub and towards forest.² This can only apply, however, to wetter regions, and to controlled burning. Experiments in the southern Cape Province suggest that if firing takes place before the grasses are dried out, the heat is less severe and destruction largely confined to the surface, not affecting roots or surface soil. The conclusion that uncontrolled veld burning is an unmixed evil is nowhere in dispute. The question of how to maintain control is, however, a difficult one, and a solution has not yet been found; there is, in the British colonies, an increasing tendency to utilize the rule-making powers of native authorities for this purpose, and if the measure is not always effective, it has at least an educative influence.

Other measures designed to strengthen the vegetal cover of the veld have been considered. One is the selection and breeding up of strains of grasses which will increase the carrying capacity of the veld. Considerable attention has been paid to this in South Africa, where Dr. Pole-Evans has selected and bred a large number of drought-resistant and heavy-yielding strains,³ and to a lesser extent in Kenya, where experiments in planting eroded areas with indigenous Kikuyu grass are being made. Allied to this method (whose chief disadvantage is its expense) is the introduction of exotic drought-resisting plants, such as Australian saltbush, to provide cover and food for stock. The planting of tree belts, the afforestation of hill-tops, the reconditioning of badly denuded areas by digging staggered trenches to arrest soil-wash on slopes, and the fencing and sealing of gullies by means of dams, are auxiliary methods of erosion control practised on pastoral land.

Finally, the complex question of the elimination of uneconomic stock cannot be divorced from that of veld management. If uneconomic stock is defined as animals maintained for purposes other than the supply of food and clothing or for sale, then a very large

¹ C. F. M. Swynnerton, *How Forestry may assist towards the Control of Tsetse Flies* (memo. presented at the 4th British Empire Forestry Conference), 1935.

² L. C. C. Liebenberg, 'Veld Burning', *Farming in South Africa*, vol. ix, nos. 99 and 100, 1934.

³ See Chap. XIII, p. 972.

proportion of the cattle and goat population of Africa is uneconomic. The problem is a psychological one: so to change the attitude of the native towards his domestic animals that they become not tokens of wealth or a form of currency, but sources of income. This adjustment would admittedly involve a revolutionary change in a habit of great social and religious significance; but if it could be made, then natives might be taught to adopt such standard practices (at present often rejected) as the castration of inferior males, supplementary feeding, calf rearing, and, above all, the limitation of stock on any given pasture to a number which will not merely survive but will thrive on the available feed. Discussion on how best to persuade them to do so has been proceeding for many years. One main stumbling-block is that the bride-price is generally paid in cattle or goats among both pastoral and agricultural tribes. Efforts to encourage the payment of bride-price in cash have met with some response among educated Africans, but little among the bulk of the tribesmen. Various possibilities have been put forward, such as Sir Daniel Hall's suggestion of striking coins bearing the image of a goat or cow, or providing special tokens shaped like live-stock and redeemable in ordinary currency, to bridge the psychological gap between the use of animal and of mineral tokens of exchange.¹ No experiments, however, appear to have been conducted, and although the question is one of the most urgent of those arising from culture-contact,² anthropological studies have not yet indicated any method whereby substitution of cash for cattle and goats might be hastened.

Another method of approach is to encourage Africans to consume more meat, milk, and dairy produce, a procedure desirable not only on grounds of health, but because once a native has learnt to regard his stock as a source of food he is likely to attach importance to the quality of his cattle rather than to their quantity. Yet a third line of attack is to assist him to find an economic outlet for his stock,³ either by establishing meat factories which buy his cattle for cash, or by teaching him better methods of preparing his hides and skins, or by instructing him in ghee manufacture and the setting up of small dairies. The chief obstacle in the way of these methods

¹ *Report of the Kenya Agricultural Commission*, 1929, p. 31. See also Chap. XIII, p. 973.

² See Chap. II, p. 22.

³ See Chap. XIII, pp. 937-40.

(which are being applied in varying degrees to several territories) is the conservatism of certain pastoral tribes, and their lack of any strong desire to obtain cash. Cattle owners do not, as a rule, evince the same enthusiasm as other types of African for clothes and other trappings of civilization, and they have not the same need for furniture and household goods. Cash to them is often of less use than cattle. There are also external factors which govern progress on these lines; meat factories,¹ for example, can only absorb a limited number of cattle, depending on the demand for meat products; and the price offered for goats cannot be made attractive, since the only part which is saleable in world markets is the skin.

All these three lines of approach to the central problem of live-stock limitation—substitution of cash as bride-price, increased consumption, and increased sale—have been, and are being, followed. The difficulty is to make action effective before pasture denudation has gone too far to be reversed. In some quarters the opinion has been expressed that education alone will prove too slow a process. In some arid regions even three or four years of severe over-grazing, followed by soil denudation and perhaps wind erosion, may be sufficient to destroy a pasture. In Kenya, for instance, it has been suggested that parts of the Turkana, Suk, and possibly Wakamba and Mbere reserves have already been eroded by over-grazing to a point where pasture cannot be satisfactorily re-established.² It has therefore been suggested that government regulation of the numbers of stock allowed to graze over certain badly denuded pastures can no longer be avoided, and that compulsory culling of stock may have to be enforced if the land is to be saved. It is recognized that compulsory de-stocking would result in difficulties for the administration, and possible hardships for individual natives, but it is suggested that the alternative of permanently abandoning considerable areas of grazing land would in the long run involve greater difficulties and severer hardships. No pronouncement of general policy on this matter appears to have been made, and no compulsion has yet been applied in any purely native part of Africa³ to enforce

¹ See below, pp. 1093, 1098. South-West Africa has a factory at Okahandja.

² *Report of the Kenya Land Commission*, Cmd. 4556, 1934, pp. 241-6.

³ Compulsory de-stocking was introduced in the Ukamba reserve in 1938.

the reduction of existing flocks and herds; perhaps the only measure definitely aimed at this purpose is the special tax on surplus cattle imposed in Ruanda-Urundi. It may be said, however, that the adjustment of the numbers of stock to the capacity of the pasture to support them is the only ultimate method of controlling erosion on pastoral land. It is self-evident that an administration should, before taking any action, call in the aid of anthropological inquiry and advice.

III. EROSION AS A WORLD PROBLEM

Since the experience of other continents suffering from erosion is not without value to Africa, some reference to the problem in China, India, Ceylon, Japan, the United States, and Australia may be useful as a prelude to the further examination of the problem in Africa.

Erosion is believed to have played an important part in the decline of past civilizations. In Mesopotamia cities now buried in sand were once surrounded by thriving farms, and the degradation of rich and fertile land into desert—in some cases due, it has been suggested, to the silting up of irrigation works—is thought to have been a primary cause of the decay of a once thriving civilization. In ancient Greece the hill-tops, now bare, were thickly forested, and the hill-sides, now rocky and barren, were well protected with vegetation. Deforestation led to the stripping of topsoil from the hills and the consequent decline of Greek agriculture; quantities of silt were deposited along the lower reaches of the rivers, and marshes and swamps were created, with the result that malaria undermined the stamina of the people. The sterile rocky hills and bare deserts of Palestine, that hem in a small strip of cultivated coastal plain, were once relatively fertile and provided good grazing for cattle and sheep.

In the interesting bulletin lately published by the Imperial Bureau of Soil Science, describing the present position in regard to erosion in the most seriously affected countries, China and India are described as presenting the most conspicuous examples of 'man-made desolation'.¹ China has in its loess soil one of the most easily erodible soils in the world, and the mischief of erosion is all

¹ G. V. Jacks and R. O. Whyte, *op. cit.*, pp. 32 and 57.

the more noticeable because of the *laissez-faire* policy of past Chinese governments, and the impotence of the small landowner to check the damage single-handed. Erosion in India is most serious in the foothills of its mountain ranges, where gullies and floods devastate large areas; but over and above this, great losses are being incurred by misuse of grasslands. They are lands which can maintain themselves only under conditions of reasonable treatment; persistent over-grazing has so impoverished them that in many cases the village herds are driven to treat the bush growth as a reserve, with grave consequences in surface erosion. The measures taken by the Indian Government have by no means been as energetic as circumstances required. It maintains the great forest reserves, mostly in the hills, which are the chief protection for the flow of the rivers, and consequently for the Indian irrigation system; but some large forest areas have been allowed to go back into village hands with the worst results. In some areas efforts are being made to reduce overstocking by directing attention to the improvement in the quality of cattle; large cattle-farms have been started, and the castration of bulls has made considerable progress on a voluntary basis; but in other respects the devolution of authority to local governments, and by them to local self-governing bodies, has left the country without any effective means of meeting a problem which is essentially one that requires a co-ordinated attack. Perhaps the one measure which affords a useful precedent for Africa is the Act passed in 1902 to enable the *chôs* or gully erosion areas in the Hoshiarpur district of the Punjab to be closed periodically to grazing,¹ with a view to allow for the re-seeding of natural grasses.

Ceylon was one of the first of the British territories to recognize the significance of erosion, and in 1929 appointed a committee to investigate its problems.² It was 'appalled by the waste of soil', but beyond some permissive legislation regarding the preservation of hill-tops and the issue of regulations regarding the disposal of Crown lands, further action was deferred pending the result of a 5-7 year period of propaganda and education. On the other hand, Japan affords a case in which the mischief of erosion was not only

¹ *Report of the Punjab Erosion Committee, 1934.*

² *Report of the Committee on Soil Erosion, 1931.*

early recognized, but firmly countered by the administration. As far back as 1781 Japan engaged a Dutch engineer to apply a system of flood control by means of check dams in the valleys and revegetation on the hills. Thereafter Japan maintained a national policy of keeping the watersheds under forest in order to protect the valleys from floods. It is remarkable that although Japan is among the most closely settled countries in the world, no less than 67.2 per cent. of its area is under forest, compared with 8 per cent. in Africa. In 1897 a Forestry Act was passed making flood regulation compulsory; but where control measures based on check dams and revegetation are enforced on private land, the state contributes five-sixths of the cost. It is said that altogether ten times the value of eroding land has been spent in protecting it.¹

If some considerable attention is given to the case of the United States, it is because of the example afforded both of extensive research into the problems of erosion and of very comprehensive action taken by the state to remedy the mischief which inquiry has revealed. Before the coming of the white man, one-half of the country was estimated to be under forest, and one-third under buffalo-grass range. Colonization has led to the destruction of about half the forest, to the ploughing up of vast areas of grass-land, and to the introduction of cattle and sheep. The results have followed the courses outlined earlier in this chapter. One-third of the total area under crops is estimated to be suffering from advanced sheet erosion, and the security of another third is threatened. On grazing land the situation is no less serious. About 46 per cent. (884,000,000 acres) of the land area of the United States is under range, of which one-third (known as the public domain) is owned by the federal government; it is unfenced and no control was exercised over it by the federal government until three years ago. As a result, this land has been so severely over-grazed that some of it has been totally destroyed, and a large part, estimated at 122,500,000 acres, has been greatly depleted. The reason, as in Africa, is the increase of stock;² the present stocking of the range of six states is estimated to be 100 per cent. in excess of

¹ W. C. Lowdermilk, 'Erosion Control in Japan', *Oriental Engineer*, March 1927.

² *The Western Range*, U.S. 74th Congress, and Session, Senate Document 199, 1936, p. 155.

their grazing capacity. The original grasses have been largely replaced by weeds which are not only greatly inferior as feed but do not form a true cover. The same fate has overtaken much of the range in private ownership, one-third of the total, and of the remaining third belonging to the various states. The desert has grown from 2.5 per cent. of the total land area to over 4 per cent.

The most spectacular examples of erosion are to be found in that part of the continent lying between the Mississippi and the Rockies, known as the Great Plains, which has been converted by the plough from the original buffalo range into the existing 'dust bowl'. Between 1880, when the covered wagon era ended, and 1930, some 189,000,000 acres of pasture were put to the plough. The greater part of the region has a rainfall of 20 inches a year or less, and it is now realized that the period of settlement coincided with a wet cycle. This fact, combined with the original fertility of virgin land and with high prices, at first enabled farmers to make a living by growing crops for which conditions were not suited, on units of land which were uneconomic. The combination of a dry cycle and low prices between 1930 and 1936 revealed the basic weakness of the system. Wind erosion removed the topsoil in dense dust storms from vast areas that should never have been ploughed. It is estimated that 8,738,000 acres of farm land have been destroyed, and a further 82,353,000 severely damaged, by wind erosion.¹ There are, it is estimated, some 75,000,000 acres of land which should be retired permanently from use, because it 'is so poorly adapted to farming, and has deteriorated so rapidly, that nothing is in store for the inhabitants but extreme poverty and wretchedness'.² Some 10,000,000 acres have been bought by the government, turned into national parks, and the inhabitants moved and resettled elsewhere. Since 1930 it is estimated that some 40,000 families, or 165,000 people, have left the Great Plains area and sought a living elsewhere.

Vigorous and costly measures are now being taken to deal with erosion on a nation-wide scale; the details are only important where they indicate action which may have a possible application to Africa. The Soil Erosion Service set up in 1933 has now been

¹ *Report on National Planning*, op. cit., pp. 168, 171.

² *The Future of the Great Plains*, 75th Congress, Document 144, Feb. 1937.

enlarged into the Soil Conservation Service, with an annual vote which at present stands at £7,000,000. The indiscriminate use of the public domain for grazing was controlled by the Taylor Grazing Act of 1934; the Resettlement Administration, set up in 1933 to buy up hopelessly eroded land and to resettle the inhabitants elsewhere, had, before its dissolution in 1937, spent some £90,000,000 on these objects. In addition to these direct government measures, the spread of conservation practices was further stimulated by the passage of the Soil Conservation Act early in 1936. Under this Act farmers are directly subsidized for withdrawing land from certain soil-depleting crops, notably maize and cotton, and putting it under soil-conserving crops or under pasture. The main object of the Act is to reduce the acreage under certain crops grown for sale; it is, however, having a considerable effect in combating soil erosion and exhaustion.

Up to the middle of 1937 the Soil Conservation Service had established 156 erosion control projects, varying in size from projects covering a few thousand acres to a project in the south-west covering 17,000,000 acres and embracing the whole Navajo Indian reservation. The essential features of all projects are the same. The farmer undertakes to plan his farm operations on lines laid down by the Soil Conservation Service, and the Service agrees to assist him with a specified amount of mechanical aid, extra labour, and materials, not only in anti-erosion works such as terracing and check dams, but also in alterations in the system of cultivation or treatment of grazing areas. Both in cultivated areas and on range land, the Soil Conservation Service has proceeded some way along the road towards control which Africa has yet to travel, and nearly all the methods followed in the United States have possible applications in Africa. An interesting illustration is afforded by the work of the regional division centred on Albuquerque, N.M., where the Service is operating in an arid tract with a rainfall of 10 or 15 inches, except in the higher parts. Water is very scarce. Through the region run the upper section of the Rio Grande river and several of its tributaries; it includes the Navajo Indian reservation, which is heavily overstocked with cattle, sheep, and ponies. Soil erosion is far advanced. The problem is a dual one: to protect the head-waters of the rivers so as to control floods and silting, and

to restore the depleted pastures. The first is being met by the establishment of two projects, one covering the head-waters of the Rio Grande, and the other the watershed of the Gila river, where flood-control works and reafforestation are being carried out. The second is being tackled by reduction of live-stock, by checking and reclaiming gullies, and by applying a carefully worked out system of pasture management. In the Navajo reservation a cut of 28 per cent. in live-stock numbers was claimed as having been completed by July 1937.¹ Considerable reluctance to cull their stock was displayed by the Navajos, but anthropologists were engaged to advise how the Indians might best be approached, and finally an agreement was signed with the Indian tribal council. As the result of a practical demonstration of the value of fencing and pasture control, as evidenced by the state of the live-stock, the opposition to stock reduction and pasture management appears to be weakening. At the same time the spread of gullies is arrested by throwing up low dikes or 'spreaders' around the heads, so that flood water is spread fanwise over the land and stimulates the growth of better grass. Officers of the Service who deal with the Navajos have, of course, one advantage over administrators who deal with African natives, in that the Navajos keep sheep primarily for profit, and do not have the same emotional objections as the Africans to the sale of their stock.

In Australia scientific opinion seems to hold that the settlement of certain regions was pushed too far and carried out too hastily. In Victoria, for instance, land policy in the eighties led to the cry: 'Settle men where the big trees grow.' The forests of the Otway region in the south-west of the state, which at that time had an 80-inch rainfall, were opened to settlement and then cut and burnt down. The cultivation that replaced them was subjected to heavy wash, and to-day most of this land has been abandoned. A committee has now been set up to devise means of combating wind erosion. Provisions for stopping cultivation or burning near water-courses, and for maintaining a certain percentage of each farm under vegetation, have been laid down.²

¹ *Annual Report*, Region No. 8, Soil Conservation Service, 1937, p. 1.

² Empire Forestry Conference, South Africa, 1935. *Report of Committee on Forests in relation to Climate, Water Conservation, and Erosion*, p. 22.

The watershed of the Murray river presents a special problem. The drainage area of the Murray comprises one-fifth of Australia, and in it live three-quarters of the population; it also supports a big irrigation system which plays a vital part in Australia's economy. Erosion in many parts of the watershed is causing concern; increased run-off is occurring in winter and spring, and the summer fall of the level of rivers and streams is greater. The trouble is blamed principally on the burning of pastures in the catchment area. Experience in Australia has been that burning eventually kills out the grass, impoverishes the land, and promotes the growth of useless scrub. Proposals have been made to dedicate vulnerable sections as forest reserve, to reafforest denuded areas, and to revise grazing leases so as to control over-grazing.

IV. THE SITUATION IN DIFFERENT TERRITORIES OF AFRICA

(a) *General*

Africa's climatic conditions are specially favourable to the development of erosion. Progressive deforestation has been going on for centuries, thanks to the practice of shifting cultivation,¹ and has resulted in the existence over wide areas of a degraded, open type of vegetation which does not shelter the soil so well as forest, and is more susceptible to drought. Forest destruction may have adversely affected the rainfall, although this is not established beyond doubt. All that is certainly known is that forest does both induce precipitation by cooling the atmosphere above it, and conserve soil moisture by reducing evaporation. The great loss of forest which Africa has sustained must, therefore, have led to less frequent precipitation and to an increased loss of soil moisture, due to the higher evaporation rate, in those regions where it has been destroyed.

The system of shifting cultivation, although wasteful, had the advantage that, after two or three years' use, every piece of land was rested, often for a considerable number of years.² This not only allowed the soil to accumulate organic matter but safeguarded it from severe erosion, since land that was resting reverted to bush

¹ See Chap. XIII, p. 879.

² See also G. V. Jacks and R. O. Whyte, *op. cit.*, p. 33 regarding *taungya* in Burma.

and grass. At any given time, therefore, the greater part of the land was under vegetation, and so relatively safe from erosive influences. The effect of European rule has been, in almost every territory, to exaggerate several of the factors which lead to soil erosion. In the first place it has led to increases in population in certain areas, with the result that more land is needed to grow food. The concentration of natives in reserves, especially in South Africa and Kenya, has been an important factor in increasing erosion. Commercial crops now occupy very large acreages and mean that more and more land is put under cultivation. Again, the first agricultural lesson learnt by Africans has often been to give up their old custom of growing all their crops together on one plot, and to grow a single crop of, say, beans or maize, in rows. Mixed cropping kept a permanent vegetal cover on the land, but crops planted in rows expose the soil to erosive influences. Finally, the introduction of the plough has not proved an unmixed blessing. By greatly extending the area which an individual can cultivate it has greatly extended the area exposed to erosion, since native peasants have seldom combined ploughing with protective measures such as terracing and strip-cropping. In several of the British dependencies (e.g. Nigeria and Nyasaland) the Agricultural Departments have adopted a 'go-slow' policy in regard to the introduction of ploughs, until conservation measures and 'mixed farming' in particular have been more widely applied.

The very considerable increase in land under cultivation has led inevitably to a shortening of the period of bush-fallow. Land which would previously have been left alone for twenty years is now recultivated in four or five, or even less. It has been estimated, for example, that in the most crowded parts of the Kikuyu reserve in Kenya, 1 acre in every 3 is now under crops, whereas thirty years ago only 1 acre in every 10 or 12 was cultivated. The result is a gradual depletion of the soil's organic and mineral resources, and the removal of vegetal cover from a larger area of land. Added to this is the fact that cultivation is being pushed on to the more unfavourable land which is often on steep slopes, and therefore particularly susceptible. The natural conclusion is that sheet erosion—always, as has been pointed out, invisible to the naked

eye in its fairly early stages—is beginning to take place on the cultivated soils of Africa on an accelerated scale.

Live-stock populations are, undoubtedly, increasing at a much more rapid rate than the human. This is due primarily to the control of animal diseases by veterinary science. The most notable example is that of rinderpest, which used periodically to sweep over the African plains with the rapidity and ferocity of a veld fire, decimating the cattle populations. Other diseases such as pleuropneumonia, anaplasmosis and, to a lesser extent, East Coast fever have also been brought under control. The great epidemic that began in 1889 had its influence on the political history both of Kenya and Southern Rhodesia. In some areas the number of live-stock has doubled, while nothing has been done simultaneously to increase the capacity of the pastures. Goats have been condemned on all sides for their destructive feeding habits. They are seldom killed for food, and are economically of low value. Although skins have a steady sale and are exported in large and increasing quantities from both East and West Africa, the price is low. Among many tribes the bride-price is still largely paid in goats. With increasing prosperity the number required for this purpose has doubled or trebled, with the result that far more goats have to be kept to achieve the same end.

So much for the general situation in Africa as a whole. In the following pages an outline will be given of the position in each territory, and of the measures being taken to deal with it.

(b) Union of South Africa

Accelerated erosion is no new problem in the Union. Warning voices have been raised for the past half-century; but until recently little or no attention has been paid to them. In 1904 a Farmers' Congress passed a resolution urging the government to inquire into the serious shrinkage of water supplies due to the formation of sluits and to rapid run-off. The Director of Irrigation drew up a memorandum on the subject, citing, as the main causes, deforestation, overstocking, veld-burning, and kraaling of stock, but nothing came of the discussion. A select committee of the Senate which considered erosion in 1914 received much evidence concerning the loss of vegetal cover and the shrinkage of rainfall

within living memory. It was stated, for example, that in 1879 the Orange Free State was covered with bush grass interspersed with reedy pools, whereas by the time of the inquiry the pools had dried up and the grass had suffered badly from over-grazing. In 1919 occurred the most serious drought the Union had experienced. One result was the appointment of the Drought Investigation Commission, which in 1923 issued the most outspoken report hitherto produced on the subject of desiccation, pasture management, and erosion in Africa.

The report dispelled the generally prevailing idea that South Africa's rainfall had decreased. No evidence, it stated, had been submitted to prove that any change had taken place in precipitation; but 'the rains of the last generation, falling on unbroken, under-stocked grazing lands, were more lasting in their beneficial results than rains of equal magnitude falling to-day on veld over-stocked, tramped-out, semi-waterproof, hard-baked by sun and veld fires'.¹ The severe losses of the 1919 drought, the Commission concluded, were caused mainly by faulty veld and stock management. Over-grazing and erosion were widespread and growing rapidly worse. The power of the surface of the land to hold up and absorb water had been diminished; pastures had deteriorated, perennials having given way to annuals and weeds; the water table had fallen; rivers had become more seasonal in flow, and their silt loads had increased. A number of remedies was proposed. One was the abandonment of the system of kraaling live-stock at night, due to jackal depredations, and the substitution of paddocking. The Commission estimated that if kraaling were abolished throughout the Union the resulting improvement in the sheep population would bring in an extra £13,000,000 a year to South Africa. The importance of the control of veld burning—with the ultimate aim of its abolition—was emphasized. The Commission also recommended, *inter alia*, the provision of reserve fodder for stock to tide over dry periods; the provision of more watering places for stock; grazing control to ensure periodic resting of pastures to allow for re-seeding; and an extensive scheme of reafforestation combined with protection of catchment areas.

Since the publication of this report, which was not followed by

¹ *Final Report*, op. cit., U.G. 49, 1923, p. 5.

any large-scale government action until ten years later, further evidence of the extent and effect of erosion has accumulated. No province has escaped damage. The carrying capacity of the Union's natural pastures is much lower than it was twenty years ago.¹ Studies of silting show that the loss in the storage capacities of four important reservoirs, all built between 1920 and 1925, due to the accumulation of silt,² was in one case 43 per cent. and in the three others 33 per cent., 25 per cent., and 14 per cent.

A point of significance is that silting of reservoirs increases the proportion of surface to total volume of water and aggravates losses from evaporation, which are in any case extremely high in Africa. As a corollary to the silting up of old rivers, the creation of new ones—due to the extreme development of gullying—has been observed. The Brak river (Britstown District), for example, which by 1907 was 300 feet wide and 15 feet deep, did not exist at all sixty years before.³

South Africa is predominantly a pastoral country, and less than 15 per cent. of its area is estimated to be suitable for any form of cultivation. Its primary problems in erosion control, therefore, are, first, to arrive at a system of veld and stock management which will maintain a permanent cover of useful grasses on the veld, and, second, to make the fullest use of its water supplies. Having regard to the fact that South Africa is a country of erratic rainfall with frequent dry seasons, the amount of live-stock now maintained is a major obstacle to the solution of these problems. The sheep population rose from 12,000,000 in 1904 to 45,000,000 in 1932, and the cattle population from 3,500,000 in 1904 to 10,500,000 in 1930. The Department of Agriculture is carrying out experiments on such matters as the effect of rotational grazing, artificial fertilizers, and other factors on veld management; the use of supplementary pastures; and the breeding and selection of drought-resisting strains of grass. Propaganda is conducted among European farmers to persuade them to paddock their land; to reduce veld burning; to plant trees; to ridge-furrow or terrace

¹ 'Annual Report of Department of Agriculture and Forestry', *Farming in South Africa*, vol. xi, no. 129, 1936, p. 500.

² A. D. Lewis, *Silting of Four Large Reservoirs in South Africa*, Second Congress on Large Dams, Washington, D.C., 1936, Communication no. 5, p. 2.

³ F. E. Kanthack, *Sluice: their Evil and Prevention*, G. 62, 1907, pp. 4-5.

their land; and to preserve flood water in small dams.¹ A beginning has been made in watershed control by the purchase of land on the Outeniqua mountains (Cape Province) and on the Swartberg mountains. Additional areas on the Drakensberg are being brought under control as the leases expire. On this government land, grazing and burning will be prohibited, and, as funds permit, reafforestation will be carried out.

Arable land, although it occupies a small percentage of South Africa, is of great economic importance, and here erosion is increasing in severity. 'A problem . . . which is assuming larger and larger proportions, is the question of abandoned lands which have become exhausted and are unsuitable for crop production. These abandoned lands, which already constitute a large proportion of our arable lands, especially in the maize belt, not only serve to aggravate the problem of soil erosion, but in addition the vegetation growing therein consists mainly of weeds and inferior grasses which are naturally wholly unsuitable for grazing.'² The Department is striving to bring these dangers home to the European arable farmers by propaganda, and to persuade them to control erosion by contour banking and by the planting of American aloes to reinforce the banks. Wind erosion is also said to be increasing 'at an alarming rate each year'.³ Methods advocated to check it include leaving strips of unploughed land at intervals across the field, the planting of saltbush or spineless cactus strips, and the provision of tree belts.

The creation of dongas and sluits, and the waste of rain water through run-off, are two important and allied erosion problems. They are being jointly tackled by a scheme launched by the government in August 1933. The object is to assist European farmers to build small dams. After about two years a total of 12,959 dams had been built, and an estimated total of £1,801,075 spent on anti-erosion works, mostly by the farmers themselves. During the year 1936-7 the number of dams applied for and approved was 18,060, the preliminary estimated cost being

¹ See Chap. XV, p. 1034.

² 'Annual Report of the Secretary for Agriculture', *Farming in South Africa*, vol. ix, no. 105, 1934, p. 493.

³ J. P. J. van Vuren, 'The Problem of Wind-Eroded Lands', *Farming in South Africa*, vol. xii, no. 132, 1937, p. 125.

£2,163,260, while the preliminary estimated cost of anti-erosion works was £385,581. A further government scheme has recently been put into force to encourage landowners in coastal areas to reclaim drift sand areas, which have lately been spreading at an alarming rate.

Soil erosion has reached an equally, if not more serious stage in the Transkei and in the native reserves. The Native Economic Commission of 1930-2 concluded that all the reserves were overstocked, and that parts of some of them were in danger of reversion to desert conditions.¹ In the Transkei about 1,500,000 sheep have to live on about 9,000 square miles of pasture. Grazing lands, as a result, are trodden out and re-seeding rarely occurs; forest and bush have virtually disappeared. Gullies have everywhere grown out of cattle tracks leading to water or to dips. Money for reclamation was first voted by the Transkeian Council in 1926, and a start was made with the check damming of gullies. In 1932 construction of store dams, a costly measure, was abandoned in favour of the diversion of storm waters from the heads of gullies and the planting of grass on the donga sides. Between 1926 and 1936 the Council spent £77,832 on erosion control, which included fencing of gullies and contour ridging of land.² In parts of the Transkei and Ciskei up to £3 and £3 10s. an acre is being spent on anti-erosion measures such as damming and fencing gullies and planting wattle. Over the native reserves as a whole, an annual sum of about £7,000 has been spent by the Union Government in recent years on small conservation works for irrigation purposes.

At the end of 1933 an attempt to tackle the problem in the native reserves was started by the Native Affairs Department, with the threefold object of combating soil erosion generally, of providing storm-water irrigation, and of contouring agricultural land.³ A few badly eroded areas were reclaimed by fencing and the prohibition of grazing. The Native Affairs Department policy is now based on the assumption that grazing control, veld management, and overstocking deserve prior consideration over reclamation works. It has been estimated that 75 per cent. of the total area of Zululand

¹ See Chap. XIII, p. 971.

² See Chap. IX, p. 531.

³ *Combating Soil Erosion in the Native Reserves of the Union*, Department of Native Affairs, 1934, p. 3. See also Chap. XII, p. 808.

is affected by erosion. Production is said to have been reduced by 10 per cent. by this factor; and if nothing were done to check the spread of erosion, production would fall by 40 per cent. in the next twenty years. The Native Affairs Department's programme aims at a drastic reduction in the number of scrub bulls, at the improvement of cattle by means of selection under the 'bull camp scheme', and at the introduction of a six-year rotational grazing practice. The application of this programme is still in the early stages. A compulsory fencing proclamation was issued in 1931, but has not yet been applied on any large scale. It has been used in the M'singa region of Zululand for fencing off gullies.

(c) *Basutoland*

The greater part of Basutoland is mountainous and is inhabited by cattle owners. The population has recently increased to a remarkable degree. In 1898 it was estimated at 256,000; by 1931 this estimate had grown to 570,000. The rainfall is badly distributed; a long dry season allows the soil to dry and crack, and then torrential storms occur. Given these premises, erosion would appear inevitable, and in fact there are probably few parts of Africa that can produce more marked examples. The problem is principally one of soil wash from the steep hill-sides, which are mainly cultivated, and of gullying, which in 1935 was estimated to have affected 10 per cent. of the total arable land.¹ Gullies, often up to 40 feet deep, cut across almost every valley bottom. On the higher elevations, mainly over 7,000 feet, over-grazing has killed the nutritious grasses, and led to the invasion of the inedible weed 'bitter karoo' and of a ragweed poisonous to horses.

In 1935 Sir Alan Pim described soil erosion as the most pressing of all its problems. As a result of his recommendations a Director of Agriculture was appointed, and placed in charge of anti-erosion operations. Work began early in 1935, and in August 1936 an interest-free loan of £160,233 was made from the Colonial Development Fund to finance the scheme.² The principal part of the work is to arrest the spread of gullies by fencing gully heads, diverting storm water by the extensive contour ridging and terracing of

¹ *Report of the Commission on the Financial and Economic Position of Basutoland*, Cmd. 4907, 1935, p. 135.

² See Chap. XV, p. 1038.

arable land, and planting grasses to re-establish eroded pastures. Existing gullies are also being reclaimed by means of earthworks on which a cover of Kikuyu or native grass is established, and by planting trees. At first the local population was suspicious, and considerable opposition occurred, trees in some cases being rooted up. Two years of work and propaganda dispelled fears, and the people are now giving the project their full support, even though the making of contour ridges and broad-base terraces entails the upsetting of all existing boundaries of fields. The area to be reclaimed is estimated at 150,000 acres, and the cost at £1 an acre; it is hoped to complete the work in ten years. Erosion control in Basutoland has an importance transcending its own borders, since the watershed of two important rivers, the Orange and the Caledon, lies within the territory.

(d) *Swaziland*

Although in Swaziland overstocking is not so grave a problem as it is in Basutoland, it has of recent years become increasingly serious. Another danger to the soil comes from the extended use of the plough. Unless care is taken erosion will result from the up and down hill ploughing which is already a common practice.¹

(e) *Southern Rhodesia*

Only 0.5 per cent. of the area of Southern Rhodesia is cultivated, so that arable erosion is not quantitatively severe. On the other hand, it is clear that the smallness of the area under cultivation makes such land all the more valuable; and the fertility of a considerable part of it is threatened by erosion. The soils, derived mainly from granites and sandstones, appear to be relatively erodible, and in the older cultivated districts such as northern Mashonaland many areas have been destroyed by over-cultivation. The average soil loss in Mashonaland is said to be a quarter of an inch a year. The underground water-level, it is said, has 'sunk dangerously low'.² In the extreme western part of the colony

¹ *Report of the Commission on the Financial and Economic Situation of Swaziland*, Cmd. 4114, 1932, p. 107.

² *Report of the Enquiry into the Economic Position of the Agricultural Industry of Southern Rhodesia*, 1934, p. 21.

overstocking has led to extensive soil loss from sheet erosion, and land that grew good crops of maize thirty years ago is now described as 'desert country' where farmers can no longer make a living. This condition is insidiously spreading east.

Erosion is also a dangerous element in the native reserves, where the population is increasing steadily.¹ Excessive overstocking exists in parts, and is aggravated by the increase in the bride-price which has taken place. Gullying has spread seriously during recent years, especially in Matabeleland. A potent cause is the wearing down of tracks made by the ox-drawn sleighs on which natives transport their own firewood and also the fuel for their European employers' tobacco flues.

Propaganda among European farmers in favour of anti-erosion measures started on a small scale in 1921. Few active steps were taken until 1929, when farmers began to protect their land by contour ridging. In 1931 the Rhodesia Agricultural Union appointed a Soil Erosion Committee whose report recommended the establishment of district soil conservation boards coordinated by a central soil conservation advisory council to advise the government on general policy. It also suggested that the Land Bank should increase facilities for loans for conservation works, that legislation should be amended so as to control veld fires and timber cutting, and that the Water Act should be extended so as to provide for the protection of catchment areas. The reduction of native stock, it stated, was a vital question, and it suggested that better facilities for the sale of cattle should be provided. Further recommendations were made by a committee which reported in 1934 on the economic position of the agricultural industry.² This committee recommended the building of small storage dams to hold up water, and also of larger irrigation dams, and suggested that the government should assist by making grants or loans on easy terms. It also recommended afforestation of catchment areas, and the extension of contour ridging on arable land.

Some progress in erosion control has been made. By the end of 1936, 1,597 miles of contour ridging had been done; it is assumed

¹ See Chap. XII, p. 809.

² *Report of the Enquiry into the Economic Position of the Agricultural Industry of Southern Rhodesia*, 1934, pp. 21-2.

that one mile of ridging protects 25 to 30 acres. At the present rate of progress about 3 per cent. of the total arable area is ridged annually. A Soil Conservation Act is under consideration. Free help and advice are given to farmers by government engineers, and government advances on easy terms are made for conservation and irrigation works. The Agricultural Department issues, free, limited quantities of Kudzu vine (which has been found useful for the quick revegetation of gullies in the United States), spineless cactus, and certain creeping grasses for planting in places where severe soil wash has occurred.

The Native Development Department now employs a soil conservation officer and a small staff of agricultural and erosion officers, who conduct propaganda in the reserves and supervise the construction of small conservation works. Efforts are being made to reach agreement with chiefs to divide the land into arable and grazing sections and forest reserves. A soil, vegetation, and land utilization survey of about 6,000,000 acres has been completed, and this has proved a useful guide to the erosive potentialities of different districts. The government has organized the construction of dams, weirs, and boreholes in the reserves. Up to March 1937 a sum of £138,154 had been spent on these activities. While the provision of more waterholes has relieved pressure on the land by permitting a more even distribution of stock, it has not by any means solved the problem, since cattle continue to increase. In spite of the active steps being taken, it is probable that in certain parts of the native reserves erosion is still gaining ground.

(f) *Northern Rhodesia*

Since the greater part of Northern Rhodesia is under savannah forest and bush, with only a small percentage of cultivation, and since between 50 and 60 per cent. is protected from overstocking by tsetse-fly, erosion is in the main a localized problem. In parts of the Southern Province, in particular, the introduction of ploughs has led to severe soil loss. The natives in this fly-free area are abandoning their old system of mixed cropping, which protected the soil, and ploughing up large fields in which maize is planted in rows. The soil is thus exposed, run-off is still further increased by the removal of stumps, and sheet erosion is the result. In the Central Province

and in a certain proportion of the native reserves the increase in the total area under cultivation is leading to a shortening of the period of bush fallow, and rapid deforestation is taking place.¹ Soil fertility is not generally high, and throughout the greater part of the country it is estimated that land can only be cultivated for two years and must then be rested for a number of years which natives were wont to put at twenty-five, but which must at all events be enough to allow for the restoration of forest growth. The population is unequally distributed, varying from over-concentration in some native reserves to a density of under 3 per square mile in other areas; it is in many districts already in excess of a figure which would allow much of the land to be rested for as long as is necessary.² In some places the growing of Kaffir corn, a particularly soil-exhausting crop, is causing rapid deterioration of soil.

In the north, north-west, and north-east of the territory, serious deforestation is occurring, partly as a result of changes in the traditional *chitemene* system of agriculture, some of which have resulted from European rule. Under this system, the native cultivator collects timber and brushwood from a wide area around his plot, and burns it on the land to be cultivated in order to obtain a fertilizing ash and to destroy weeds and insect pests. In the old days *chitemene* caused a certain amount of deforestation, but the usual practice was either to pollard the trees or to cut them down about shoulder- or waist-high, in which case they eventually grew up again. Owing partly to the absence of a large proportion of the able-bodied men in the mines, the natives, in some tribes at least, now chop down the trees altogether so that they cannot recover. Sometimes as much as 10 acres of forest may be cleared in this way to provide ash for one acre of cultivation. Large areas in the north-west have been reduced in this way from forest to poor scrub and grassland, showing signs of soil deterioration.³

No anti-erosion measures have as yet been taken by the government; but two agricultural research stations have been set up, one at Abercorn and the other in the Southern Province, where the question will be among the problems examined. An ecological

¹ *Annual Report on Native Affairs*, 1936, p. 16.

² See Chap. XII, pp. 810-11, 835, and Chap. XIII, p. 879.

³ C. G. Trapnell and J. N. Clothier, *The Soils, Vegetation and Agricultural Systems of North Western Rhodesia, Report of the Ecological Survey*, 1937, p. 60.

survey of the north-western districts was recently completed,¹ and the information obtained should provide a basis for any future attempts at the use of land planning.

(g) *Nyasaland*

Erosion is regarded in Nyasaland as one of the most serious of the country's problems, particularly in the Shire Highlands, where the rainfall is generous but seasonal, and the population density high. Extensive deforestation on hill-sides has occurred; even in the last fifty years large tracts of forest have disappeared, and streams that used to flow regularly have become seasonal or even ceased to flow at all. It is said that this factor has rendered vast tracts of once fertile country uninhabitable, and that Nyasaland as a whole is now incapable of supporting one-half the population that it did one hundred years ago.² Though generalizations of this nature must be accepted with caution, yet the damage done is obvious. Important rivers, such as the Shire, have silted up; so much topsoil has been removed by wash that mountains and hills are now masses of bare rock, and once forested plains are treeless.

Certain of the Nyasaland soils are apt to form compact subsoil pans and crusts from which the topsoil is easily washed away. In the lowland areas there are frequent depressions, called *dambos* or *dimbas*, filled with fine soil particles washed down from the hills, and generally so waterlogged that cultivation is impossible without extensive draining. Measurements of soil loss from a newly cleared field on a 4 per cent. slope near Zomba, on red lateritic loam, showed that nearly 30 tons of topsoil were removed in a season.³ Steep slopes are everywhere under cultivation, and in a few places the population density is as high as 300 to the square mile. Soil loss is going on all the time, accentuated by such factors as the prevailing native custom of heating newly cleared soil in preparation for planting finger millet. On European farms erosion has taken a severe toll on tobacco lands, which have in some cases been reduced from a rich loam to a poor sandy loam by the placing of ridges and furrows for tobacco cultivation up and down the slope instead of along the contour.

Anti-erosion measures have been based upon the protection of

¹ *Ibid.*

² A. J. W. Hornby, *op. cit.*, p. 8.

³ *Ibid.*, p. 12.

the lowlands by reafforestation of the hills; but progress has been slow because reafforestation is expensive. No special organization has been created for erosion control, but efforts are co-ordinated by a Native Welfare Committee consisting of representatives of the different departments concerned. Forty-eight forest reserves have been scheduled on catchment areas, and natural vegetation within eight yards of the edge of the streams is protected in native areas. Native cultivation on steep slopes is in practice often prohibited, although there is no legislative basis for this action. In 1932 a Bush Fires Ordinance was issued to control burning, and to authorize penalties for those caught illegally starting fires; it has proved impossible in practice to stop bush fires altogether, but the damage is minimized by controlled burning carried out by the authorities before the traditional grass-burning season arrives.

Early in 1933 a committee of the Department of Agriculture recommended to the government (*inter alia*) that a stop should be put to the destruction of natural vegetation on steep slopes under the Forest Rules, that the cultivation of slopes with a gradient of more than one in eight should be prohibited unless terracing was first carried out, and that efforts be made to persuade the natives to reduce, and if possible abandon, the cultivation of finger millet. In addition, the government was urged to dig more wells so as to open up unoccupied land, and to appoint fire boards to settle the dates for the controlled early-burning of vegetation. In 1937, a Forest Officer, who had previously visited the United States to study methods of erosion control, was appointed for three years to supervise the application of land-use programmes in the Central and Northern Provinces.

(h) *Tanganyika*

The fact that the greater part of the territory is infested with tsetse fly has safeguarded large areas from damage by overgrazing; but where the tsetse area has advanced into cattle country, the resulting concentration of people and cattle in an ever lessening area has caused serious erosion. While tsetse in occupation of an area may preserve it from erosion, tsetse invading a hitherto uninfested area are a serious factor in causing erosion. The Director of Veterinary Services has estimated that 25,000 square

miles in the Lake, Central, and North-West Provinces are overstocked. He has put the carrying capacity of the available pastures at about 2,000,000 cattle and 2,000,000 sheep and goats, whereas there are at present 3,000,000 head of each of these categories of stock.

The government's tsetse policy has been to drive out the fly by clearing selected areas of bush, attention at the same time being concentrated on clearing corridors and barriers which open up the maximum area of new country with the minimum destruction of cover. The newly opened land is made over to native settlers, under conditions which will preserve the land and its water supplies.¹ Considerable acreages have been so treated. A solution of the overstocking problem by clearing more and more land of bush and opening up fresh water supplies can only be obtained if controlled grazing is practised in the new areas; if land were cleared of tsetse only to be over-grazed by stock the last state would be worse than the first.

Erosion is widespread on cultivated land, which only occupies, however, about one-thirtieth of the territory. The Central and Lake Provinces and the Kilimanjaro area are the most seriously affected. In the Central Province gullying is widespread, and some areas in the province are now rendered useless by it. In the Kilimanjaro area cultivation—largely of coffee—has replaced natural forest; the fertility of the once rich loam has been greatly reduced by soil wash, and recently the quality and yield of coffee has suffered. In the south-western part of the territory, round the Lupa gold-fields, land that was under cultivation sixty years ago is now barren and uninhabitable.² Experiments carried out at Mpwapwa, in northern Tanganyika (where the rainfall is 26 inches), showed an average soil loss over two seasons of 59·36 tons on a bare plot, whereas no losses at all from grass plots were recorded. The run-off from a bare, uncultivated plot was 55 times that on a grass plot.³

Recognition of the need for soil conservation came with the world depression. Up to 1929 crop yields, as a result of loss of soil

¹ E. Harrison, *Soil Erosion*, Tanganyika Territory, 1937, p. 10.

² D. R. Grantham in *Geographical Journal*, vol. lxxxii, no. 2, 1933, p. 147.

³ R. R. Staples, 'Vegetation Types and Water Supplies', *East African Agricultural Journal*, vol. i, no. 6, 1935, pp. 453-5.

fertility, had been generally declining; but prices were high and profits satisfactory. With the fall in prices, attention became focused on the fall in yields. In 1931 an inter-departmental committee, set up to advise on the soil erosion problem, followed the example of Ceylon in holding that the first step must be to create a public opinion aware of the dangers and ready to co-operate in overcoming them. The Agricultural, Veterinary, and Education Departments joined in a campaign of propaganda on the subject. At the same time native administrations have been induced to enact rules making compulsory the adoption of anti-erosion measures. In eight districts (out of some forty-five) they have enacted rules covering all cultivations, while in two other districts rules have so far been applied to coffee only, which must be planted on land that has been terraced or contour-ridged. The native administrations in the Kilimanjaro area passed rules regulating coffee cultivation in 1932, following the concentration in the district of twenty-seven native instructors, equipped with dioramas, who spread propaganda and gave demonstrations. By the end of 1932, 1,200 new coffee plots had been planted in the approved (terraced) way. Rules have also been passed by the native authority on Mounts Kilimanjaro and Meru to prohibit cultivation near streams and to control grazing on the sides of the valleys. Communal reafforestation was begun here on a small scale in 1934. In the Lake Province a number of native authorities have passed rules for the preservation and rotation of grazing, for the protection of hill-tops and hill-sides from bush cutting and burning, and for the planting of trees. The native authorities in this province have also provided a number of dams, both large and small, and bore-holes. It is interesting to note that the text of the rules enacted by the chief of Usiha for the protection of trees on hills represents the chief as acting in his traditional role of rain-maker.¹ In the Iringa Province efforts are being made to control the burning of grass, and schemes of reafforestation and wind-break planting have been adopted by native authorities. The enlistment of the support of a number of chiefs and councils is considered to be a very important step forward in erosion control.

Forest rules were passed in 1933 authorizing administrative

¹ See E. Harrison, *op. cit.*, pp. 20-1.

officers to prohibit the destruction of trees on the upper slopes of hills and on the banks of streams. A survey of the relation between erosion and water supplies was carried out in 1935, and the need for the provision of new water supplies to open up uninhabited areas was stressed.¹ Experiments on a system of deferred grazing are being carried out in the Lake Province, where erosion caused by overstocking is particularly severe. Wind erosion has done severe damage in this province, and a policy of planting tree belts, launched in 1930, has established several hundred miles of wind breaks. Efforts are also being made to increase consumption of meat. A meat factory was established with government assistance at Mwanza, but at the end of some years proved unsuccessful.

At the experimental farms at Dodoma, Kandoa Irangi, and Singida demonstrations are carried out of the control and management of stock, and experiments are being conducted on the use of quick-growing manyara and sisal hedges, and on the value of groundnut tops for supplementary feeding of cattle. One of the problems in the Central and Northern Provinces is the concentration of population in the hills, where slopes are too steep for safe cultivation; recently a few settlements have been organized in the plains, with a small demonstration farm attached to each, in the hope that these examples will induce other natives to follow suit. In spite of such measures, however, erosion is still gaining ground in certain parts, notably where over-grazing exists. The Colonial Development Fund has given favourable consideration in 1937 to a request for assistance in carrying out a five-year scheme of water supply, forest preservation, and other anti-erosion measures.²

(i) *Kenya*

Erosion in parts of Kenya has reached an advanced stage. The Agricultural Adviser to the Secretary of State for the Colonies has stated that it is impossible to exaggerate the severity of the damage that has been done.³ This is, broadly speaking, of two types: sheet erosion and gullying in the hilly agricultural districts of the

¹ See Chap. XV, p. 1044.

² See Chap. XV, p. 1045.

³ Sir F. Stockdale, 'Soil Erosion in the Colonial Empire', *Empire Journal of Experimental Agriculture*, vol. v, no. 20, 1937, p. 290.

highlands, and the creation of desert conditions in the arid and sub-arid pastoral districts at lower altitudes. The first type affects both European and native lands. On alienated farms erosion was allowed to proceed some way before its nature and causes were understood, and considerable loss of topsoil occurred from coffee and maize land. Yields of maize and wheat began, in places, to decline. As in Tanganyika, realization of the danger came with the world depression. As a result of propaganda conducted both by the Agricultural Department and by the Arbor Society, anti-erosion measures such as broad-base terracing, green-manuring, composting, and the retiring of steep slopes from cultivation are being taken on the European farms, though not yet on a scale sufficient to control erosion altogether. The obstacle in this case is lack of money rather than indifference. The Land and Agricultural Bank now permits advances to be made for erosion works on the security of the crop, but no assistance is given by government, as it is in South Africa, to farmers for anti-erosion work. Probably the most serious erosion on European farms is being caused by the stock of native squatters, which has increased enormously in the last ten years. Farms which were closed down or abandoned during the world depression were often taken over by uncontrolled native stock, over-grazed, and seriously damaged. An ordinance has recently been issued enabling squatter stock to be limited or prohibited in a district where a majority of the landowners vote in favour of such a course. The question has naturally been mooted, but not answered, of what is to become of the banned stock, should many of the districts take advantage of this provision; overstocking is already acute in most of the native reserves.¹

A survey of the underground water resources of the colony noted evidence of progressive desiccation during the past twenty years, and observed a tendency for perennial streams to become seasonal. Lake Rudolph has been falling at the rate of one foot a year for the past twenty-five years.² No general steps have yet been taken to prohibit cultivation on river-banks, or destruction of trees outside the forest reserves, nor has the government incurred direct expenditure in controlling head-waters or catchment areas.

A considerable amount of sheet and gully erosion has occurred

¹ See Chap. XII, p. 754.

² A. W. Champion, *op. cit.*, p. 107.

in parts of the Kavirondo reserve, where the acreage under export crops such as cotton and simsim is increasing year by year. The growing popularity of ploughs is another factor that has caused soil deterioration, and sheet erosion due to over-cultivation of slopes and over-grazing by goats is also occurring in the Kikuyu reserve. For the most part it is in its comparatively early stages and is therefore not plainly visible to the eye, but the number of *shambas* occupying steep slopes is such that its existence cannot be doubted. This reserve has suffered particularly from destruction of forest. A clue to the loss of topsoil which is occurring continuously on the cleared slopes of Mount Kenya is given by the heavy discharge of silt from the Tana river, which creates a brown stain in the Indian Ocean twenty or thirty miles out to sea. Measurements of the silt carried down by some of its small tributaries have shown that a storm may increase the load of silt fivefold.¹ In the lower-lying parts of the reserve, east of Embu, overstocking with goats and, more recently, cotton cultivation have caused such severe damage that parts of the Mbere District are now only fit to be abandoned.

It is in the mainly pastoral reserves of the Kamasia, the Suk, and the Turkana, and in the semi-pastoral, semi-agricultural reserve of the Wakamba, that the problem is at its worst.² Kamasia embraces a ridge of hilly and well-watered escarpment where cultivation is practised, sometimes on a slope of 70 per cent. or over. The lower slopes are given over to goats, who have reduced the vegetation to a little thorn and sansevieria and to a thin covering of weeds. The hill-sides are badly gullied.³ Excessive numbers of goats are carried, the average being 33 to each family; overstocking is, in fact, acute. The Suk reserve is entirely pastoral, except where vegetation has been totally destroyed and the land rendered useless. The carrying capacity, estimated at the rate of 50 acres to the beast, is put at 21,000 cattle only; the actual stock population is about 38,000 cattle and 135,870 sheep and goats.

The Ukamba reserve is divided into two sections, Machakos

¹ V. A. Beckley, *Soil Erosion*, Kenya Department of Agriculture, Bulletin 1, 1935, p. 8.

² See Chap. XII, pp. 811-12.

³ C. Maher, *Soil Erosion and Land Utilization in the Kamasia, Njemps, and East Suk Reserves*, 1937 (unpublished).

and Kitui, and both are notorious for the degree of erosion that has been reached. The Machakos reserve consists of a series of rolling ridges separated by gentle valleys; the tops of these hills were once forested, but they have now been stripped so bare that hardly a tree remains. Rainfall on the ridges varies from about 40 to 50 inches, so that drastic erosion occurs on bare or cultivated land. It is estimated that 37 per cent. of the Ukamba reserve, or 391,000 acres, has been eroded down to the subsoil and beyond.¹ The stock population of the Wakamba is now 250,000 cattle, 269,000 goats, and 50,000 sheep. The carrying capacity of their reserve was estimated in 1929 at a total of 60,000 head;² and since then it has declined. Every 3 acres now have to carry about 1 cow or ox and 2 goats. It has been estimated that about 50 acres should be allowed in the interests of the land. The Kitui reserve, unlike Machakos, is relatively flat and parts of it are semi-arid. The population has increased from 105,855 in 1921 to 152,584 in 1932; shifting cultivation is practised; the land has suffered accordingly, and famines are frequent. Cotton cultivation has recently been introduced, and sheet erosion has already reached the visible stage on most cotton plots. Overstocking is chronic, and water so scarce that cattle sometimes have to travel thirty or forty miles to drink. The hills are now bare of vegetation, badly gullied, and scoured by run-off.³

In recent years the government has become alive to the need for taking action in regard to the reserves, but it has not yet provided funds sufficient to deal with the problem on an effective scale. An Agricultural Officer has been seconded to make surveys of the badly eroded areas, and comprehensive reports of four of the regions have been prepared. In Kavirondo, nine small reclamation schemes have been approved by Local Native Councils, and a beginning has been made in checking the ploughing of steep slopes, building small dams, restricting cultivation on the edge of streams, and digging trenches or planting sisal and aloe lines along the contour of gentle slopes.⁴ In the Kikuyu reserve the introduc-

¹ C. Maher, *Soil Erosion and Land Utilisation in the Ukamba (Machakos) Reserve*, 1937 (unpublished), Appendix A.

² *Report of the Agricultural Commission*, 1929, p. 29.

³ C. Maher, *Soil Erosion and Land Utilisation in the Ukamba (Kitui) Reserve*, 1937 (unpublished).

⁴ Sir F. Stockdale, *Report on his Visit, etc.*, op. cit., pp. 89-90.

tion of wattle¹ as a commercial crop has been a marked success, both as a cash crop and as a method of reafforesting the hill-sides and improving soil fertility. Mixed farming is gaining in popularity, the principal check to its spread being difficulties of land tenure. In one administrative district alone, however, there were recently estimated to be over 400 mixed farmers; almost every village is now provided with a compost-pit. The excessive and growing population of goats, which are extremely harmful to vegetation and (in rich areas such as the Kikuyu reserve) economically of negligible value, is still a problem which defies solution. The amended Native Authority Ordinance issued in 1937 authorizes headmen to give orders to control grass fires, and to prohibit grazing within areas closed to stock for reconditioning; headmen may also be empowered to call out able-bodied men for work on anti-erosion projects.

In pastoral areas the outlook is less hopeful. The live-stock population of the colony as a whole has more than doubled since 1920.² No large-scale attempts to limit stock or to institute systems of controlled grazing have been made. In Kamasia a Reconditioning Officer was appointed in 1930, and up to May, 1937 (about 6½ years), a total of £5,646 has been voted by the government, and £373 by the Baringo Local Native Council. (It is interesting to note that, during the last ten years, £9,308 has been spent by the government on famine relief in this reserve.) The method of reconditioning adopted is to close an area every year to all classes of stock, so as to enable the grasses to regenerate by natural seeding. Run-off on bare land is prevented by the digging of small trenches along the contour, and where the vegetation has been completely destroyed grass roots (Star and Kikuyu grasses) are planted by hand at the beginning of the rains. After two years a limited number of cattle are allowed back. Between 1931 and 1936, 9,500 acres had been reconditioned; the programme for 1936-7 involved 10,000 acres. The total area of the Kamasia reserve is 993,920 acres, of which it is estimated that 674,000 acres require reconditioning. Difficulty is experienced in the reconditioned areas in keeping the stock down to the figure allowed, and in stopping the trespassing of goats; and much

¹ See Chap. XIII, p. 890.

² *Report*, op. cit., Cmd. 4556, 1934, pp. 494-5.

damage has been incurred from premature or over-heavy stocking. The subsequent control of reconditioned land raises a problem that has not yet been solved, since it is obvious that the money spent will be thrown away if the land is again subjected to unrestricted stocking.

In the Ukamba reserve attention was first officially called to the progress of erosion by a memorandum submitted to the East African Commission by the Ulu Settlers' Association in 1924. The Agricultural Commission under the chairmanship of Sir Daniel Hall, which reported in 1929, urged immediate action, and recommended the compulsory culling of cattle.¹ The Kenya Land Commission of 1933 described erosion and overstocking in this reserve in very strong terms, and recommended that action should be taken without delay to introduce the culling of surplus stock and the control of grazing. The first action was taken in 1932, when 200 acres were experimentally stagger-trenched. In 1935 the Machakos Local Native Council engaged a Reconditioning Officer who treated 476 acres with stagger-trenching during the next two years; a further 200 acres were planted with Napier grass, and a total of 25,350 acres was closed to stock. In the past twelve years the Forestry Department has established just over 1,000 acres of trees (mainly gums) on the hill-tops. Less than 0.02 per cent. of the whole area is under forest reserve, in spite of the high proportion of hilly land. The possibility of opening a meat factory to buy surplus stock was first explored in 1927, and discussed at intervals for the next ten years. In 1937 Messrs. Liebig started building a factory in the Ukamba reserve capable of absorbing a maximum of 30,000 head of stock a year.

In the Kitui reserve expenditure on reconditioning has totalled £1,754 in the last ten years. In June 1936 the Kitui Local Native Council authorized headmen to call out able-bodied males for work on the closing of areas to stock and on stagger-trenching. In 1936 a scheme for the reconditioning of the whole Ukamba reserve was drawn up by an officer especially seconded to make erosion surveys, and application was made to the Colonial Development Fund for a grant to finance it. In November 1937 a sum of £34,000 was made available, £10,000 as a grant, and £24,000 as

¹ The enforcement of destocking measures has led in 1938 to protests from the natives.

a loan, to the Local Native Council. The work will be carried out by the newly formed Soil Conservation Service of the Department of Agriculture. The Kitui reserve embraces about 250,000 acres infested with tsetse fly, and part of this will be opened up.

Widespread erosion due to overstocking also exists in parts of the arid Northern Frontier District, which occupies nearly half the colony. The Turkana desert south-east of Lake Rudolph is said to be advancing eastwards, and wind erosion is severe. Trampling, around the few and scattered wells, has created ever-widening circles of complete desert. The administration is attempting to provide new water supplies by building shallow dams to hold rain water, which is at present almost wholly wasted.

(j) *Uganda*

It is only recently that the existence of insidious and fairly widespread sheet erosion in Uganda has been recognized. Before the days of British rule, cultivation was scattered about in small patches in the bush and elephant grass, and little erosion occurred. The natives maintained soil fertility by mulching with banana leaves and split stems, and grew food crops in mixed stands so that the land was seldom without cover. The larger trees were rarely cut down. The introduction of cotton revolutionized the agricultural economy of the people. By 1936 some 1,500,000 acres were under cotton, and all of it represented new cultivation. Total acreage under food crops has also enormously increased, and the widespread introduction of ploughs has enabled the size of individual plots to be extended.¹

The worst erosion in Uganda occurs in the Eastern Province, especially in the Karamoja District near the edge of the Turkana desert. When Mount Elgon, on the Uganda-Kenya border, was first described in 1896, all its slopes were thickly forested; the forest is now shaved completely as far as the 7,000 feet contour line. The Karamoja region acts as a buffer between the desert and the agricultural regions to the west. Very severe overstocking exists. The grass is trampled out, the earth hard and impervious, and every rain storm pares the soil still further towards its bone.²

¹ W. S. Martin, *Agriculture and Agricultural Resources in Uganda*, Appendix A (unpublished).

² E. J. Wayland and N. V. Brasnett, *op. cit.*, p. 64.

The area as a whole is short of water, and a few wells have been drilled to secure the better distribution of stock. No control over the total numbers of stock in the district has, however, been attained, and it has been pointed out that a more even distribution without limitation of total numbers will only make matters worse, since the stock will increase to the limit beyond which the pasture will not keep them even barely alive.¹

In the Teso District, farther south, erosion on crop lands has arisen owing to a dense population and to the introduction of ploughs. The human population has increased from 266,000 in 1921 to 302,000 in 1936, and the cattle population has more than doubled since 1911. Cotton now occupies 158,900 acres, and there are over 15,000 ploughs at work. Ploughing—often up and down the slope—has largely superseded hand hoeing; clean clearing and the complete removal of roots and stumps has followed. The rainfall is irregular; the land suffers badly from desiccation during the dry season, and widespread sheet erosion has taken place. The practice of green-manuring, rotations, and slope-contouring is urgently needed.

Much forest has been destroyed by pastoral tribes in the past. The elephant grass that covers so much of Uganda is thought to be a secondary growth following the trees. Reafforestation is needed, especially in Karamoja. It has been stated that (partly no doubt as a sequel to forest destruction) the ground-water level is falling, and several lakes, notably Lakes George, Edward, and Kioga, are receding. This, in due course, is likely to lead to a slight but definite decrease in precipitation.

It is probable that no part of the protectorate is completely free from erosion damage. Gullying has reached a severe stage in the north, and both sheet and gully erosion is bad in the Ankole and West Nile Districts. In parts of the West Nile, where cotton is now extensively grown, heavy losses have occurred, and the soil has been described as a 'thin skin over quartz rubble'. Sheet erosion occurs in parts of the Buganda Province, where coffee and cotton are grown on slopes without terracing or contour ridging. Cotton yields are, in fact, beginning to decline, and quality has recently shown a tendency to fall off.

¹ E. J. Wayland and N. V. Brasnett, *op. cit.*, p. 53.

Government action was taken in July 1935, when an Agricultural Survey Committee, set up to deal generally with agricultural development, stated that no measures to restrict the increase of stock could be considered too drastic if soil erosion was the only alternative. A local committee, which reviewed the position in the Teso District, reported to the Survey Committee at the end of 1935, and as a result an Agricultural Officer has been posted to the district to organize such anti-erosion measures as involve no heavy capital expenditure. In 1936 an interim report was issued by the Director of Geological Survey and the Conservator of Forests.¹ Recommendations included an air survey of eroded areas, the demarcation and protection of all surviving forest and thick bush, the introduction of the weed *lantana* to provide cover, the drilling (where possible) of new wells, and a reduction of cattle in the Eastern Province and Ankole District. The writers of the report viewed with grave concern the debushing of parts of the country by the Veterinary Department in order to eradicate tsetse, since this—in the absence of any restriction on cattle increase—was merely an invitation to further erosion. A soil conservation scheme for the whole protectorate, costing £83,000 spread over ten years, was outlined. No indication has yet been given as to how far the government intends to act upon this report.

Experiments conducted by the Department of Agriculture have shown that fertility can be maintained by the resting of cultivated land for two or three years, at fairly frequent intervals, under elephant grass.² On coffee plantations, soil wash can be checked by laying elephant grass or banana trash along the contour, or by mulches of the same fibrous material. In the Eastern Province the widespread introduction of mixed farming, combined with broad-base terraces on slopes, is needed if the remaining topsoil is to be saved.

(k) *Sierra Leone*

Degradation of the original rain forest to bush and savannah has, according to some authorities, proceeded farther in Sierra Leone than in any other part of West Africa.³ Destruction of

¹ See above, p. 1058, note 3.

² See Chap. XIII, p. 962.

³ E. P. Stebbing, *The Forests of West Africa and the Sahara*, 1937, p. 3.

forest by shifting cultivation has been going on for a long time, but has been greatly accelerated recently by the growth of crops for export. Much of the country which was once forest-clad is now under secondary bush, and in the last few years a great deal of this bush has given way to cultivation.¹ The rainfall is high, and considerable loss of fertile topsoil has taken place. Coffee and other crops grown in the southern part of the territory have seriously deteriorated, and little terracing has yet been done; here the policy of the Agricultural Department is now declared to be to encourage terracing and mulching.

The northern part of the protectorate has suffered loss by the washing of soil from the undulating hills into the intersecting swampy valleys, where rice is grown. The chief problem here is the maintenance of soil fertility; many villages have been abandoned or considerably reduced in population owing to the deterioration of the soil. At the Njala agricultural station experiments are being conducted on green-manuring (for which the pigeon pea seems most suitable), and a search is being made for a quick-growing tree to plant on land reverting to bush fallow. The government has recently made a beginning in the demarcation of forest reserves with the object of checking further forest destruction, and is encouraging the growing of rice, which tends towards concentration of cultivation on level ground where erosion does not occur.

(1) *Gold Coast*

Over a million acres of land which were once under rain forest, the climax of growth in this region, are now under cacao. The forest is still receding. The clearance of forest has resulted in a general reduction of humidity in the cacao plantations, and this, combined with loss of soil fertility and of topsoil, has led to the dying back of cacao trees.² Soil loss has to some extent been held in check by the fact that the stumps of the forest trees have for the most part been left in the ground, thus facilitating absorption of rain water, and by the custom of growing food crops among the cacao trees. Even so, it has been stated that an

¹ F. A. Stockdale, *Report on his Visit to Nigeria, the Gold Coast, and Sierra Leone*, C.A.C. 270, 1936, p. 108.

² See Chap. XIV, pp. 1002-3.

active policy of forest conservation is needed if the cacao industry is to be saved from serious deterioration. Erosion is more serious where old forest land has been planted in maize, the principal food crop of the Gold Coast; large areas of maize land have now been stripped of their topsoil, and yields correspondingly reduced, especially near the coast.

The length to which soil deterioration has gone in this region was shown recently when an attempt to grow bananas for export from the port of Takoradi failed owing to the poverty of the soil, and the would-be growers were forced to go farther inland where virgin soil could still be found. In the northern part of the country the control of rinderpest has led to a rapid increase in stock, and over-grazing has recently become a serious problem. An attempt is being made to encourage mixed farming, and to persuade natives to grow cassava roots in order to feed their cattle during the dry season.

(m) *Nigeria*

Erosion in the Southern Provinces is to a large extent controlled by the traditional native system of cultivation, which is to grow crops on mounds made by throwing up the top layer of soil, so as to bury the weeds and grass;¹ in addition, mixed cropping is practised, so that the land is rarely left without vegetal cover. Investigation has shown this system to be sound, and the policy of the Agricultural Department is to foster it, and at the same time to discourage the introduction of ploughs unless mixed farming is practised and manure applied to the land. The spread of cultivation is, however, taking place at the expense of the forest, and this factor may in time have an injurious effect on the cacao plantations of the western districts. Already erosion has become serious in parts of the south-east provinces, largely because of the drastic shortening of the period of fallow, and gullies 100 feet deep are not exceptional in hilly regions.

In an earlier chapter, reference was made to differing views held on the question whether the Sahara is advancing into North Nigeria.² In one sense the Sahara is undoubtedly advancing; the land on its borders is suffering from an increasing degradation.

¹ See Chap. XIII, p. 880.

² See Chap. I, p. 14, and Chap. XIV, p. 999.

Not only is grass being killed by excessive trampling and by burning, but such trees as have managed to adapt themselves to the arid conditions are repeatedly pollarded in order to provide food for goats, and in this way weakened and killed. Fine sand blown from the north by the seasonal harmattan is a factor, although not the major one, in deteriorating soil conditions. Doubt has been expressed as to whether the careful and industrious system of agriculture practised around Kano can survive for much longer, if destruction of vegetation continues at the present rate. In the Southern Sahara itself there is evidence that rivers have dried up, and the water table—which is now 50 feet or more beneath the surface—has fallen within the last two or three centuries. North of the Anglo-French boundary, territory that is now true desert was fairly closely populated until well into the eighteenth century; it has been stated that: 'it has only taken some 200 years to depopulate a country as large as the Union of South Africa.'¹ It is a natural assumption that destruction of such vegetal cover as exists farther south, if allowed to continue, may have the same effect.

An Anglo-French Commission was recently appointed to collect all available data on the progress of desiccation along the Niger-Nigeria border, and on the causes of the spread of desert conditions.² This commission, consisting of three French and four British members, examined the situation on the spot from December 1936 to February 1937. It reported that trees had suffered severely from shifting cultivation, and that sand, borne by strong east winds blowing at the beginning of the rains, had frequently destroyed germinating crops by burying them. It recommended the establishment of shelter-belts at right-angles to the winds and of hedges or lines of trees to mark farm boundaries, and the creation of tree plantations.

South of the Sahara fringe, but still in the Northern Provinces, signs of soil exhaustion due to the continuous planting of cotton and groundnuts, to the shortening of the period of fallow, and to veld burning, are becoming apparent. There is evidence that this

¹ Empire Forestry Conference, South Africa, 1935, *Report of the Committee on Forests in relation to Climate, Water Conservation and Erosion*, p. 25.

² *Report of Anglo-French Forestry Commission, Nigeria-Niger, Dec. 1936-Feb. 1937.*

region was once much more thickly forested than it is at present. Erosion is most severe in the 10-15-inch rainfall belt, where the hot, dry season, when the harmattan blows, is followed by torrential rains. In the north-west the situation is being aggravated by the flow of population from the French colonies, following recent tax reductions in Nigeria, which is leading to bush destruction and to soil deterioration. Mixed farming is now believed to be the sovereign remedy for soil depletion.¹ Green-manuring has been tried, but has proved a failure owing to the length of the dry season.

Farther south extensive clearing of forest has taken place, the trees having been replaced by coarse *cymbopogon* grass; and an area which used to be regarded as the granary of the south will now produce a considerable surplus in favourable seasons only. Fertility is gradually falling, and there is a danger that the deterioration may be progressive so long as the population increases. Measures taken to arrest this tendency include the importation of a small herd of Gold Coast cattle, partially immune to tsetse infection,² as part of the policy of encouraging mixed farming, and experiments with green manure and cover crops. It is hoped, with the use of such crops, to be able to reduce the period of fallow without also reducing soil fertility. The Forestry Department is reclaiming a badly gullied part of the Udi plateau in Southern Nigeria by prohibiting grazing, checking fires, building small dams at the heads of gullies, and digging staggered trenches along the contour on sloping land.

(n) *Problem of Soil Erosion in the Territories of the other Colonial Powers*

It is recognized in the French colonies that the introduction of measures to stop wholesale firing and to control shifting cultivation is essential; and that though rules have been drawn up on the subject of these practices their introduction must be a delicate business. The rules have been introduced into the Cameroons, and the benefits are said to be already becoming evident.³

In the Niger Colony and French Sudan the forest is of the

¹ See Chap. XIII, p. 963.

² See Chap. XIII, pp. 933, 976.

³ J. Méniand, 'Rapport succinct sur la politique forestière poursuivie dans les colonies françaises—résultats obtenus depuis 1926', *Actes, II^e Congrès International de Sylviculture*, 1936, vol. iii, pp. 655-7.

savannah type subject to shifting cultivation. Annual firing and the strong winds of the dry season are making the savannah more and more open; the covering layer of sand on the soil increases in thickness, and the open savannah degenerates into thorn bush and, lastly, tufted grass masses. With the disappearance of the latter full desert conditions are achieved. There is no forest staff in these colonies and no protective steps appear to have been introduced, but the joint Anglo-French Commission, to which reference has been made, has studied the problem.¹ In the Gabon fears have been expressed that the practice of shifting cultivation may gravely injure the forest growth, but steps do not seem to have been taken to deal with the matter.² There has been a serious deterioration in part of the lands producing groundnuts in Senegal, but it is doubtful if this was due to erosion, or merely the result of overcropping.

The effects of serious erosion are observable in the Belgian mandated territory of Ruanda-Urundi, and there is reason to believe that similar problems face the administrations in parts of the Portuguese territories. It might well be that an investigation into the question of erosion in these territories would yield interesting results. The effects of erosion are, on the other hand, less observable in the Belgian Congo, but the government has already begun to take measures to prevent it, notably the constitution of numerous forest reserves and a rigorous application of the decree concerning the cutting of wood in Crown forests.³

The Belgian *Ministère des Colonies* has published an admirable pamphlet on soil erosion, based mainly on experience and experiments in British territories.⁴

V. CONCLUSION

There are certain difficulties inherent in a study of soil erosion, whether in Africa or elsewhere. It has been made clear⁵ that the term has here been used throughout in the sense of accelerated erosion, due to the action of man. But it is never easy to distin-

¹ See above, p. 1104.

² M. Maclatchy, quoted in G. V. Jacks and R. O. Whyte, op. cit., p. 66.

³ See Chap. XIV, p. 1007.

⁴ G. Tondeur, *L'Érosion du sol*, Propagande et Colonisation, no. 15, 1937.

⁵ See above, p. 1056.

guish the damage due to the direct action of man from that which natural forces must inevitably occasion. The task is all the more difficult when the area under observation is, like the greater part of Africa, one of unstable climatic equilibrium. There is always the danger that the observer may be led to regard as due to man, and therefore capable of redress by him, matters for which there is, in the nature of things, no ready remedy. In the particular case of Africa a survey of the extent of erosion, consisting as it does of a summary of unrelated expert opinions, cannot be regarded as a scientifically objective statement. Erosion may appear, from the evidence, to be a serious problem in one territory and of little significance in another; but this impression may be largely a result of the greater interest taken in the subject in the one territory than in the other, which may in turn be traced to the personality of the officers principally concerned. Nor can the efficacy of the anti-erosion measures taken in different territories be fairly compared from the evidence available. Propaganda among natives, for example, is a method employed in many government campaigns, but its value depends upon the weapons used; it may be worthless; on the other hand, if energetically handled, it may be very effective. This summary can only be regarded, therefore, as a rough guide to the subject.

Even so, certain facts clearly emerge. The first is the widespread nature of the problem. Hardly a territory is free from the threat or the reality of erosion in one form or another. A second point which arises is the need for factual surveys of soil conditions, types of vegetation, extent of stocking, and the agricultural customs of the people, in order that a clear picture may be obtained of the extent to which soil deterioration has already proceeded, and of the factors making for its acceleration or the reverse. Only on the basis of such concrete information can a sound policy of soil conservation for any particular area concerned be evolved; for, while the principles are the same everywhere, the practice must vary widely according to soil, climate, the use to which the land is put, and the customs of the people who inhabit it.

The survey will vary in value for different territories, since the range of potential damage from erosion, and the form in which the damage may come, also differ widely. The problem has a very

different aspect on the Belgian Congo and in East Africa. But there can be no territory which can afford entirely to neglect it, for soil conservation is of universal interest in Africa. Except in the regions where minerals are of predominant importance, the wealth of the African people can be derived only from the soil; if the soil fails, then the ideals of African advancement must fail too.¹ A rising standard of living cannot be based upon a falling level of soil fertility. In most countries of Europe, where the maintenance of fertility is taken for granted, soil is generally regarded as a fixed and constant element in a changing world. This attitude is a dangerous one when applied to Africa, because the assumptions on which it is based are false. Tropical soil is not constant, it is changing always; easily destroyed, only time can recreate it; unwisely treated, it will cease to yield its harvests in a very few years.

The main conclusions which emerge from the material set out in this chapter would seem to be that in no territory where erosion has become severe do the measures being taken appear to be adequate to reverse the process; and that, in spite of much that has been done, no co-ordinated policy has yet been formulated for the British African dependencies. Though conditions vary from place to place and must be independently studied, the main lines of any conservation policy must be the same throughout tropical Africa. A falling water-table on one side of a boundary is a matter of concern to the neighbouring administration, as also are such erosive factors as blowing sand and flooding along river valleys. It is, therefore, a matter of urgency for the various governments in Africa to correlate their policies. There appear, however, to be considerable differences in the extent to which regulations regarding such matters as veld-burning or protection of forests and water supplies are at present applied. No territory has yet adopted a soil conservation ordinance dealing with the matter in a comprehensive way. Nor has the question of development in relation to conservation been sufficiently considered. It was the fashion half a century ago to regard the resources of Africa as 'unlimited'. Now it is realized that not only are they limited, but that the limits are

¹ See *Report of Commission on Higher Education in East Africa*, Colonial 142, 1937, pp. 14, 16.

lower than was at first supposed. Questions such as how far development can be pushed without overstraining the capacity of the land are beginning to arise, and it is clear that, if development is not to be wasteful or even harmful, they will require serious study. These matters also bear an interesting relation to the questions of land tenure discussed in the second part of Chapter XII; it will in particular be necessary to consider how far subdivision may safely be pushed before the point is reached where the land unit is too small to support a family without deterioration, having regard to the apparent need of African soils for periodic rest.

The central element in soil conservation is, as has been stated, the maintenance on the land of sufficient vegetal cover to prevent damage by wash and wind, and to safeguard water supplies. In Africa this resolves itself into four main problems: the preservation of existing forests and the afforestation of steep slopes and hill-tops;¹ the control of overstocking and the application of scientific pasture management;² the protection of water supplies;³ and the reorganization of native agriculture, so as to extend mixed farming where possible, and to protect cultivated land by terracing, cover crops, green-manuring, strip-cropping, and other means.

The main obstacles to the solution of these problems are two in number: lack of money and lack of African co-operation. The first is mainly a local problem, although help from the Colonial Development Fund has been forthcoming in several territories.⁴ Each country has to classify the claims on its revenues according to its most fundamental needs, and, as was remarked of the question of water supply,⁵ the claims of soil conservation are certainly not less than those of some of the social services which now engage a large share of public expenditure. The second is one of the most difficult problems in the complex question of soil conservation. There are certain aspects of soil erosion work in which the state can take direct action, as, for example, the reservation of forests, or the execution of large conservation works at the head of rivers. But if a remedy is to be found for widespread mischief such as the

¹ See Chap. XIV, pp. 984 ff.

² See Chap. XIII, p. 971.

³ See Chap. XIV, p. 984.

⁴ See below, p. 1113.

⁵ See Chap. XV, p. 1052.

deterioration of soil or pasture, a vast mass of individuals must co-operate in the work, and their share in it will often involve them in much additional labour and the sacrifice of immediate profits. Governments will seek by various methods to obtain this co-operation. The French will look to the influence of their chiefs, who are now gradually taking the character of a body of trained native assistants.¹ Both France and Belgium will have at their disposal the methods of 'educative cultivation'.² The British administrations will use the services of the 'native administrations', and have, indeed, as has been shown, already begun to do so on a wide scale. But none of these agencies can in the long run be effective unless the conviction is widely spread in African society that soil conservation is for the benefit of the individual more than for that of the state.

Some observers have doubted whether the quality of propaganda now carried on by certain of the British territories is sufficiently well organized. At present such propaganda is one of many duties performed by Administrative Officers, by Agricultural Officers, and by native members of agricultural staffs; but it is made less effective by the small proportion of both Administrative and Departmental Officers who really know the local languages. In a few territories (e.g. Kenya and Tanganyika) the subject is being introduced into native schools. With the exception of the issue of posters in Swahili by the Kenya Arbor Society (an unofficial body), the showing of a soil erosion film in East Africa, and a projected experiment in vernacular broadcasting in Kenya,³ and some slight use of the native press,⁴ it has not been found possible to make much use of modern methods of propaganda. Further activity is clearly required, though it must be realized that at present only a limited use can be made, for this particular purpose, of the methods of propaganda used in civilized countries. The public which has to be reached is one of cultivators and pastoralists; to most of them the cinema and similar devices represent an alien and unfamiliar world, and the lessons conveyed by these means do not always strike them as relevant to their own circumstances. The task of persuasion will necessarily

¹ See Chap. IX, pp. 484 ff.

³ See Chap. XVIII, p. 1300.

² See Chap. XI, pp. 630 ff.

⁴ See, e.g., *Mutende*, no. 24, Feb. 1938, p. 10.

be a long one; but the most persuasive argument is, and will continue to be, an ocular proof of the benefits which the use of the new methods can ensure. That the lesson is not an easy one is shown by the difficulties encountered by the Union scientific departments in dealing with their European farmers; with the African native the difficulty is all the greater because measures considered necessary to conserve soil in some cases involve fundamental changes in his customs and outlook. The attitude of pastoral Africans to their stock, the need for the replacement of live-stock by money as the medium of exchange, and possibly alterations in native land tenure involving the introduction of individual tenure, are obvious examples. Some reference has already been made to the lack of attempts made to approach these problems from the anthropological or psychological point of view, although they are fundamentally problems of native social structure and psychology.¹

Even with more extended propaganda, however, and with the anthropologist's help, one exceptionally difficult problem is likely to remain. It is doubtful whether pastoral natives could, in general, be persuaded to acquiesce in the voluntary reduction of their stock. The herdsman is, almost universally, more conservative and more tenacious of his point of view than the agriculturist, and the deeply ingrained habit of reckoning wealth in terms of stock is unlikely to yield quickly to propaganda or advice. Meanwhile the mischief done by overstocking is cumulative, and governments in certain areas must face the question whether stronger methods of persuasion should be used, and, if so, how they could be applied. Such possibilities as a progressive stock tax rising with the animal's age, and of erecting meat factories and compelling the sale of a proportion of herds over a certain size to the factory at a fixed price, have been considered, and each has its own difficulties. No government would embark on a policy of compulsory reduction of stock except with the gravest reluctance. On the other hand, the fact cannot be denied that in some areas the land cannot be prevented from complete degradation into desert unless the pressure of stock is relieved. A point apparently deserving special consideration is the rapid increase of goats. These animals are

¹ See above, p. 106g.

seldom used extensively either for food or for any economic purpose; and in some areas they have destroyed vegetation completely and caused the worst forms of erosion.

The protection of water supplies, vital to Africa's future, is now recognized to be bound up with the restoration of forest and grass cover to hill-sides and crests. Forest policy in the African dependencies is discussed in Chapter XIV. From the point of view of erosion, a more active policy of afforestation seems needed. A considerable lack of uniformity exists in the legislation framed to protect springs and streams. The enforcement of some general minimum standard of care by passing laws or regulations (where they do not as yet exist) on the lines already laid down in some territories, prohibiting cultivation or grazing within a certain distance of all streams, and controlling fires on watersheds, might prove practicable. Something has already been said elsewhere of the need for a more thorough investigation of the underground water resources of certain areas.¹ The building of small earth-dams to control the head-waters and upper reaches of rivers, on the lines developed in Basutoland and South Africa, is another method which holds possibilities for other territories. The question of how far the provisions which exist in many African territories for the calling out of native labour on works intended for the public benefit can be used in regard to soil conservation measures appears also to be worthy of consideration.

The needs of soil conservation, which have only been generally discussed in the last few years, have not yet been reconciled with policies which were in operation before conservation was regarded as a major problem, and were, therefore, framed without consideration of the dangers of soil erosion. Contradictions can be traced in the policies of various territories. On the one hand, there is the desire to increase production as quickly as possible in order to raise the standard of living of the people; on the other hand, is the fear that, if expansion of cultivation outstrips the spread of conservation measures, permanent loss of soil fertility and the ultimate impoverishment of the people will result. On the one hand, veterinary scientists control stock diseases with a resulting increase in the numbers of inferior cattle; on the other

¹ See Chap. XIV, p. 1026.

hand, District Officers find in many places that pastures are being destroyed wholesale. At one moment the introduction of ploughs may be urged, at another ploughs may be condemned as causing erosion; in one area the clearing of tsetse bush is regarded as an urgent health measure, in the next tsetse is regarded as the preserver of bush and hence of water supplies; in one region the cultivation of cotton is regarded as the key to progress and prosperity, in the next it is accused of destroying the fertility of the soil. These and other incipient contradictions can only be resolved by interdepartmental and interstate consultation, and by co-operative planning.

It is to be regretted that there is in Great Britain no one body which can deal specifically with the range of questions arising in connexion with the problem of soil conservation in Africa. There is, however, an increasing interest in the subject, to which the extensive journeys of the Secretary of State's technical advisers have repeatedly called attention.¹ The only fund at the disposal of the Colonial Office for this purpose, the Colonial Development Fund, has been used in growing measure to finance anti-erosion measures. Whereas in the first seven years of the fund's existence, up to March, 1936, only 10 per cent. of the moneys had been devoted to land reclamation, drainage, and water projects, in the year 1936-7, 36 per cent. of the money voted, amounting to £293,643, went for these purposes.² In the eleven months ending February, 1938, £234,120 went to land reclamation and water measures in Africa. The value of this assistance would be enhanced if an expert inquiry could now be initiated, which would deal with all the areas most seriously affected, and form the basis of the interdepartmental consultations, or the interstate discussions which, as suggested above, are required in order to formulate a co-ordinated scheme of action.

¹ See, for instance, Sir F. Stockdale's *Reports*, op. cit.

² Cmd. 5537, 1937, p. 28.

CHAPTER XVII

HEALTH

It has already been stated that Africa supports a relatively small population at a low subsistence level. As might be expected, this fact is closely linked with the physical condition of the people; the problem of health is, indeed, in a great measure the problem of subsistence. Public attention and public sympathy, from the days of Livingstone onwards, have been concentrated upon the grave diseases such as leprosy, sleeping sickness, and malaria, from which in Africa there is widespread suffering, and alleviation of these sufferings has been the prime object of medical aid and of public philanthropy. The realization of another approach is rapidly gaining ground.

'No preventive campaign against malaria, against tuberculosis, or against leprosy, no maternity relief or child welfare activities, are likely to achieve any great success unless those responsible recognize the vital importance of this factor of defective nutrition and from the very start give it their most serious consideration. . . . Abundant supplies of quinine, and the multiplication of tuberculosis hospitals, sanatoria, leprosy colonies, and maternity and child welfare centres are no doubt desirable, if not essential, but none of these go to the root of the matter. The first essentials for the prevention of disease are a higher standard of health, a better physique, and a greater power of resistance to infection.'

These passages are quoted from the annual report of the Public Health Commissioner of the Government of India for 1935; but they might with equal truth have found a place in the annual health report of any African territory.¹

It is this fact, above all others, which seems to determine the position which the health services now occupy in the general organization for the development of native welfare in Africa. Important as may be the influence of nutrition on health conditions in Europe, it does not exercise the same decisive effect on the factor of resistance as in Africa. Medical science must be in Africa increasingly concerned with the relations between nutrition and health, and with advising on the medical aspect of social policies

¹ See, for example, Kenya, *Medical Department Annual Report*, 1922.

bearing on the question of subsistence. In the second place, the fact that there is one widely prevalent factor which, by reducing the power of resistance, favours the widespread existence of disease, suggests the conclusion that the methods applied by health services must be largely those of mass attack. The preventive treatment applied to certain of the African diseases, to be effective, must partake to some extent of the character of an operation, scientifically planned and humanely conducted, but military in its spirit of offensive and in the thoroughness with which it establishes itself in the area it has occupied. There is a third point; the narrowness of the financial resources available, which in Europe would appear almost derisory in view of the scope of the operations to be undertaken, requires that, under a scientific leadership, there should be a large body of assistants, who must as far as possible be Africans, and who must have as complete a system of training as circumstances will permit. The scope of activity of the health services in Africa is not, therefore, confined to the application of the lessons which modern science conveys of the causes of disease or the method of relieving it. There is added to that the task of organizing to the best purpose the narrow resources which the state can place at their disposal, the education of Africans to take part in health activities, and the co-operation with the other social services whose work lies in the betterment of African conditions of life.

I. THE BEGINNINGS OF MEDICAL WORK IN AFRICA

The Franciscan missionaries in Angola discovered in 1774 the ruins of a hospital built by the Capuchins, who occupied the territory in 1640; this appears to be the first recorded instance of medical work by Europeans south of the Sahara. The first qualified medical missionary of the Protestant churches was probably Dr. Vanderkemp, who offered his services to the London Missionary Society in 1795. In 1810 he completed a 'considerable book on midwifery' for the benefit of the Hottentots, among whom he worked at Betheldorp, near Algoa Bay.¹ The Moravian missionaries were also early in the field, and in 1823 they undertook the supervision of a leper colony at Hemel-en-Aarde, Cape Province.²

¹ A. D. Martin, *Doctor M. Vanderkemp*, 1931.

² J. E. Hutton, *Short History of the Moravian Church*, 1895.

It was not, however, until David Livingstone had captured the imagination of Europe and America that medical missionary work was established widely. Livingstone felt impelled to devote his life to the 'alleviation of human suffering', and set himself to obtain a medical education before offering himself for work in the mission field. He sailed for Capetown in 1840. In his diaries he noted the diseases prevalent among the tribes he visited. He commented on the inadequate surgical knowledge of the native doctors, and listed twenty-seven 'medicines' employed by natives.¹ His mind was much occupied with the nature of 'African fever' and the way to cure it. In 1859 he sent to Sir James Clark, M.D., in London, a report on the treatment of malaria, giving the details of many cases, the remedies administered, and their effects.

A year after Livingstone sailed for Africa, interest in the work of Dr. Peter Parker, an American medical missionary on furlough from the Far East, led to the founding by Dr. John Abercrombie of the Edinburgh Medical Missionary Society, an institution for training medical students, on graduation, for missionary work.² In South Africa the Lovedale Missionary Institution, Cape Province, was founded by the Scottish Presbyterians in 1841, and the Victoria Hospital, which is part of the Institution, was established for the treatment of disease and for the training of native nurses, hospital attendants, and dispensers. In 1847 the Society for the Propagation of the Gospel began medical work at Colesberg in South Africa. It is noteworthy that in 1849 there were only forty medical missionaries at work in the whole world.³ At a later date the American Mission Board in Johannesburg was a pioneer in the establishment of native health centres on the Reef, and also established the Bridgman Memorial Hospital, the only native maternity hospital in Johannesburg.

Medical missions in East Africa appear to have begun with the association of a lay doctor with the Holy Ghost Fathers at Zanzibar in 1863. The Universities Mission to Central Africa began work in the Shire Highlands in Nyasaland at about the same time, but moved to Zanzibar in 1865 and opened a hospital there

¹ D. Livingstone, *Missionary Travels and Researches in South Africa*, 1857, pp. 647-50.

² *A Brief History of Missionary Enterprise*, Burroughs Wellcome & Co., 1910.

³ H. O. Dwight, H. A. Tupper, and F. Bliss, *Encyclopaedia of Missions*, 1904.

in 1887. Many of the ordained missionaries of the United Free Church of Scotland and of the Established Church of Scotland were fully-qualified medical men. These missions considered that a medical officer should be appointed to the staff of every station in Africa, for the benefit of the Europeans and to train Africans for medical work among their own people. Work was begun at Livingstonia in 1875 and in the following year at Blantyre. The year 1875 witnessed also the beginning of medical work by the Church Missionary Society at Mombasa. In 1893 a hospital with fifty beds was built, and later a leper house was added.¹

West Africa had a very sinister reputation in the matter of health. The early explorers were almost wiped out by disease.² Of the first company of eighty-eight freed slaves and three Europeans which set out for Liberia in 1818, all the Europeans and many of the negroes died within a few months; at a later date, of a shipload of 105 all contracted fever within a month and many died.³ In 1832 three missionaries of the Basle Mission, one of whom was a doctor, reached the Gold Coast, following on an earlier mission of 1828 whose members had all perished, and the first medical missionary of the Church Missionary Society arrived in Sierra Leone in 1892.

In the absence of any knowledge as to the cause or cure of tropical diseases, the work of the earlier medical missionaries in Africa must often have seemed hopeless. The mortality among Europeans was very heavy. From 1835 to 1907 the Wesleyan Methodist Missionary Society sent out 225 missionaries to the West Coast, of whom 62 died in the field.⁴ Of the Baptist missionaries in the Belgian Congo in the decade 1878-88, half died. It was, indeed, only when it was realized that biological agents were the cause of tropical diseases that an improvement could be effected in the health of Europeans in tropical Africa. A meeting of doctors convened by Dr. Harford-Battersby of the Church Missionary Society, in 1893, founded Livingstone College 'for the instruction of foreign mis-

¹ Church Missionary Society, *Annual Records*, 1804-1900.

² See S. Gwynn, *Life of Mary Kingsley*, 1933; D. Wellesley and S. Gwynn, *Sir George Goldie*, 1934; Mungo Park, *Travels*, 1799.

³ R. Gurley, *Life of Jehudi Ashmun*, 1835, p. 382. See also M. D. Mackenzie, *Report on Mission to the Kru Coast*, League of Nations, C. 662. M. 319. 1932.

⁴ Methodist Missionary Society, *West African Roll-Call*, 1907.

sionaries in the elements of practical medicine'. It was decided that no certificate would be issued to those completing the course, nor should students subsequently call themselves 'medical missionaries' or assume the positions of qualified medical men. The course included lectures in elementary physiology, principles of medicine, elementary anatomy and surgery, besides tropical diseases, and also attendance at hospital clinics. Of the 1,400 missionaries who have taken this simple course, 680 served or are serving in Africa. Their work has in many cases been acknowledged by governments, and some have received government grants in aid of drugs and dressings. Certain missionaries in the Congo who have taken the Livingstone course have been asked by the Belgian and French Governments to undertake surveys with reference to the incidence of sleeping sickness, leprosy, and yaws.

Dr. Howard, who arrived in Nyasaland in 1899, was a pioneer of the new methods. He determined first to secure healthier living conditions for Europeans, but he also organized medical services among the natives, and the Nyasaland diocese established in due course a hospital and surgery on almost every station.¹ The belief that the excessive mortality among missionaries might be prevented if the newly discovered laws governing tropical diseases were better understood and applied prompted the dispatch by the Wesleyan Methodist Missionary Society in 1901 of a commission to West Africa to investigate conditions of housing and health, and to frame regulations for guarding European health and life along the coast. The Society's attention was directed to medical work among the natives in West Africa in 1904, and in 1912 a hospital was built at Ilesha in Nigeria.²

There has also been considerable extension of the medical work done by the Roman Catholic missions. The White Fathers, to whom was entrusted in 1878 the task of evangelizing the area round the Great Lakes, and whose work now extends into the Belgian Congo, Northern Rhodesia, and Tanganyika, receive medical training during their novitiate, and the care of the sick remains an invariable feature of their missionary work. In Uganda

¹ C. H. Wilson, *The History of the Universities Mission to Central Africa*, 1936.

² W. D. Holdsworth and G. G. Findlay, *History of the Wesleyan Methodist Missionary Society*, 1921, vol. iv.

also the White Sisters have since 1899 undertaken health work, and in 1935 had 5 hospitals, 10 maternity welfare centres, and 40 dispensaries. The Franciscans maintain hospitals and dispensaries in Uganda, the Belgian Congo, and elsewhere. The Fathers of the Holy Ghost, in West Africa, the Jesuits in the Rhodesias, the Benedictines in Central and East Africa and in the Belgian Congo, to mention only some of the more important religious orders, all provide some medical facilities at their stations, and maintain between them over 200 hospitals.¹ The number of fully trained doctors employed by the Roman Catholic missions is comparatively small; in 1934 there were said to be not more than 30,² and most of the medical work is done by a large number of priests and religious, trained in special courses in their countries of origin. The importance of health work is recognized by the Holy See, and a Papal Encyclical of 1936³ encouraged the training of women religious in midwifery and child welfare, with the aim of combating the high infant mortality in Africa.

As in India, the various administrations in Africa at first confined the provision of medical services to the needs of their own establishments. Only in some of the larger centres were the services extended sufficiently to provide hospitals or dispensaries for Africans. Perhaps the greatest single factor in producing a new attitude in the matter of health services for the native population was the impression created in Great Britain by the sleeping sickness epidemic in Uganda in 1901 and 1902. Various medical missionaries, including the White Fathers and the Church Missionary Society under Mr. (now Sir) Alfred Cook and his brother, were at work in the affected area. The epidemic assumed large proportions, and in March 1902 a missionary organization reported that in Kyagwe 14,000 deaths had occurred in twelve months. The Royal Society interested itself in the matter and sent out two commissions. It was estimated that 200,000 people had perished in the infected areas out of the 300,000 who originally dwelt there. In 1906 the Uganda Government came actively into the sphere of public health when Sir Hesketh Bell decided on the evacuation

¹ *Guida delle Missioni Cattoliche*, 1934, pp. 66 ff.

² *Ibid.*

³ *An Instruction of the Congregation of the Propagation of the Faith to Religious Institutes of Women regarding Assistance of Mothers and Infants in Missionary Lands*, Feb. 11, 1936.

of these areas. The public interest thus aroused in the health of Uganda received a further shock when in 1908 Colonel F. J. Lambkin reported that in certain areas the incidence of syphilis was as high as 90 per cent. Three officers of the Royal Army Medical Corps were at once sent to work on this disease, and from them as a nucleus the Uganda Government Medical Service rapidly developed.¹ The part taken by sleeping sickness in bringing the medical needs of Africa to the attention of Europe is further illustrated by the action of the Congo Free State in dispatching a mission to deal with sleeping sickness in the Congo in 1906; at a later date (1917) the situation in French Equatorial Africa moved the French Parliament to sanction a yearly grant of one million francs for medical assistance.

In the British West Coast dependencies medical services appear to have been generally neglected in the early days of settlement, and Mary Kingsley complained that 'no trouble is taken to pull the death-rate down by science'.² There were isolated medical officers, but the death-rate was high and candidates few. A committee, appointed after a deputation of merchants had waited on Mr. Chamberlain in 1901, recommended the amalgamation of the medical services on the West Coast, and this was carried out in 1902, when the West African Medical Service came into being.³

The foundation of Medical Departments in the other British colonies took place at about the same time; the various East African medical services were amalgamated in 1903, separated in 1908, and again amalgamated in 1920.⁴

As medical services improved, the confidence of the African in European medicine was gradually gained, and hospitals which were built originally for the use of sick officials have been enlarged into hospitals for the African population. The requirements of the Rand for African labour led to growing attention being devoted in Johannesburg to the scientific treatment of health conditions at the mines;⁵ the Germans showed their sense of the importance of the study of health questions by laying the foundation of a research service in their East African protectorate. In 1906-7 Dr. Koch

¹ H. B. Thomas and R. Scott, *Uganda*, 1935, pp. 299-302.

² *West African Studies*, 1899.

³ A. Balfour and H. H. Scott, *Health Problems of the Empire*, 1924, pp. 79-80.

⁴ See below, p. 1159.

⁵ See Chap. XI, p. 673.

spent 18 months in East Africa on sleeping sickness investigations. A beginning was made in French West Africa with the scheme for the medical education of Africans, which now centres in the *École de Médecine* at Dakar, though the school itself was not formally opened until 1918.¹ The Great War had its own influence in the expansion of activity in health matters. While it brought large numbers of Africans into contact with European medical methods for the first time, it also opened the eyes of those responsible for recruitment of the natives to the vast amount of preventable disease, which led to the rejection of large numbers of recruits on medical grounds. The experience of the allied forces in the East African campaign furnished unhappy proofs of the wide incidence of physical disabilities, and the French experience of recruitment was responsible for a material alteration of the policy which expected to find in West and Equatorial Africa a reservoir from which large drafts could be drawn annually for the French army. Though as many as 181,000 'Senegalese' served at different times during the War, there is no doubt that there was among them an unusually high incidence of disease during their service in Europe;² and the physical condition of natives of Equatorial Africa has proved to be so low that little or no demand is now made on that territory for recruits.

Since the War there has everywhere been a very substantial expansion in the state health services. There was, in particular, a marked development in the Congo, where the demand for industrial labour revealed a grave state of physical disability in various areas, and the inquiries of the commissions appointed to investigate the subject resulted not only in a scientific planning of the health organization in the gold and copper mines,³ but the foundation of the great organizations for medical relief, the *Foréami* and the *Fomulac*, to which reference will subsequently be made.⁴ With the extension of the state health services there has followed in most African territories a large expansion of the hospital accommodation available for Africans and, in association therewith, the creation of out-patient clinics with satellite dispensaries in the surrounding country. In some British territories this development

¹ See below, p. 1185.

³ See Chap. XI, p. 680.

² See below, p. 1138.

⁴ See below, p. 1178.

has been assisted by the active co-operation of the native authorities, who themselves in many cases finance medical and health services in their areas. The hospital system has been augmented, especially in French and Belgian territories, by the creation of mobile units for dealing with outbreaks of epidemic disease¹ or for the application of preventive measures. There has at the same time been a great increase in the organization for research into African health questions, more particularly in the British territories, and, almost everywhere, a greater measure of attention to the need of increasing the facilities for the training of Africans to take a part, in various capacities, in the work of the health services, and to the need for popular education in hygiene.

II. THE PRINCIPAL DISEASES IN AFRICA

(a) *Nutritional Deficiencies*

Nutritional problems are now much in the minds of administrations: whether the African eats enough food and, if he does, whether it is of the right kind, and whether the attack on poor nutrition may not be the most important factor in reducing disease.² African food habits complicate the problem, for there are tribes which seem to maintain physical fitness on food which is, according to nutritionists, wanting in certain constituents essential to health. Further investigation into foods and dietary habits is required, and such inquiries might with advantage be associated with attempts to obtain more complete vital statistics,³ and with the work of sociological inquiries.⁴ As information accrues from the correlation of anthropological, agricultural, dietetic, and medical findings in a district, conclusions for that particular area may be expected to suggest new foods which could be grown to make up deficiencies in the customary local diet.⁵

¹ See below, p. 1174.

² See *Africa*, vol. ix, no. 2, 1936: League of Nations, *Final Report of the Mixed Committee on the Relation of Nutrition to Health, Agriculture, and Economic Policy*, A. 13, 1937, II A; J. B. Orr, and J. L. Gilks, 'The Physique and Health of two African Tribes', Medical Research Council, *Studies of Nutrition*, 1931; W. E. McCulloch, 'An Enquiry into the Dietsaries of the Hausa and Town Fulani', *West African Medical Journal*, vol. iii, nos. 1, 2, 3, 1930.

³ M. G. de Courcy-Ireland, H. R. Hosking, and L. J. A. Loewenthal, *The Agricultural Survey Committee Nutrition Report*, no. 1—Teso (Uganda, 1936).

⁴ See Chap. XXIV, p. 1620. ⁵ See W. M. Macmillan, *Africa Emergent*, 1938, p. 27.

Reports of food deficiencies have been received from almost every territory. In most places doubts have been raised as to the adequacy of the protein in the diet. Still more frequent have been reports showing that the African suffers from deficiency of vitamin A leading to night blindness and a pathological condition of the skin. Other reports have shown the existence of scurvy and pellagra, not as a rule in typical forms, but in those minor degrees which are just recognizable, yet which may have great influence on resistance to disease. Studies have been carried out in East Africa which show that African diet is deficient in calcium and rich in phosphorus, and blood tests have revealed a corresponding deficiency and excess of these minerals. Some relation between calcium deficiency and tropical ulcer has been shown to exist, and it is now generally recognized that this disease has a nutritional basis. In South Africa evidence given recently to the Native Labour Committee drew attention to the effects of nutritional deficiencies in the health of the native population, which it was asserted was deteriorating owing to this cause, while diseases such as tuberculosis were increasing.¹

Recent researches in West Africa point to the existence of poisonous elements in some diets. In Sierra Leone, for instance, it has been established that the disease formerly diagnosed as beri-beri, and ascribed to nutritional deficiency, was in fact caused by toxic matter in unwholesome rice.²

The nourishment of infants presents a special aspect of the problem. For instance, it is said that in some areas babies grow rapidly and strongly until they are weaned at the age of about 2 years, after which, through lack of milk, they become thin and bony and develop pot-bellies owing to excess of cereal food; while, on the other hand, infant mortality in the first months after birth is in other areas reported to be heavy, owing largely to irregular breast-feeding and the custom of giving infants sour porridge during the first week of life.

Only the fringe of the problem of nutrition in Africa has yet been touched. The British Colonial Office is now about to

¹ *Cape Times*, Feb. 4, 1938.

² W. A. Burnet, 'Report on Investigations into the Problem of Oedema', *Annual Report of the Medical and Sanitary Department*, 1931, pp. 81-117.

publish the results of a general inquiry undertaken on the advice of the Economic Advisory Council;¹ but in the British colonies themselves special inquiries appear to have been limited to those made in Kenya, Nigeria, and Tanganyika.² The British dependencies have not made the same study of labour dietaries as those carried out in the Rand³ and the Belgian Congo;⁴ it will be recalled that in the latter case a dietary is prescribed by law for all employed persons.

(b) *Malaria*

Three main types of malaria are recognized, corresponding to the three common varieties of malaria parasite which affect man, namely, *Plasmodium vivax*, *P. malariae*, and *P. falciparum*. The last variety is by far the most important in tropical Africa and in the low veld in South Africa. Malaria is widespread throughout Africa, with the exception of certain highland areas and the more southerly parts of the Union of South Africa, and it is often credited with retarding the development of both European and native populations in Africa more than any other single factor, and with responsibility for a high infantile mortality rate. On this latter point it is difficult to speak with any certainty, for, as already remarked,⁵ there is inadequate material on which to calculate the true incidence of infant mortality in Africa. In regard to control of the disease, different ideas prevail. On the one hand anti-mosquito measures such as drainage and oiling are advocated, and on the other, anti-parasitic methods such as the taking of quinine and other drugs. Recent entomological investigations have shown that there are varieties even of a single species of mosquito, and that one variety may act as invertebrate host for the malaria parasite while the other does not. As species and even varieties of anopheline mosquitoes often have different breeding-places, attempts have been made with varying success at species control, but it is still too early to say whether this method is effective.

Since the publication of the League of Nations' malaria reports,⁶

¹ See Chap. XXIV, p. 1631.

² See Chap. XI, p. 673.

³ Ibid., p. 680.

⁴ See above, p. 1122, note 2.

⁵ See Chap. IV, p. 111.

⁶ See, *Report on Principles and Methods of Anti-malarial Measures in Europe, 1932: Quarterly Bulletin of the Health Organisation*, vol. v, no. 1, 1936, pp. 110-39; *Report on the Therapeutics of Malaria, 1933: Ten Years of Activity of the Malaria Commission, 1934*.

it has been generally recognized that appropriate measures to control the disease must vary from locality to locality. The Ross Institute, now incorporated with the London School of Hygiene and Tropical Medicine, has taken a leading part in advising malaria control measures in many parts of the world; its most recent achievement has been in connexion with the construction of the new Zambesi Bridge, where, as a result of planning hygienic measures before work started, scarcely a case of serious disease occurred among the European staff. Such measures cannot, however, be applied widely in rural Africa, though they may be very beneficial in urban areas, where the population is concentrated. As regards the treatment of rural areas generally, it must also be remembered that there are many parts of the world, formerly infected with malaria, where the disease has practically ceased to exist as a result of treatment and normal agricultural development; indeed, in many areas anophelines have remained common after malaria has disappeared. Even the elimination of malaria in townships in Africa by mosquito-control measures has raised its own problem, though one admittedly of a second order, in that Africans that live under mosquito-free conditions in these towns gradually lose their immunity, and are liable to acute attacks of the disease on their return to endemic areas.¹

In regard to the French colonies, Professor E. Marchoux has given it as his opinion that in most of the country the best approach to a solution of the problem is to cure the sick and improve the standard of living, and the general acceptance of this theory has furnished a stimulus to the execution of the policy of development associated with the name of M. Sarraut.² In the Belgian Congo information on the incidence of malaria has been collected during the past five years.³ The disease has been considerably reduced in townships in the Congo by anti-mosquito measures, the sanitary

¹ See N. H. Swellengrebel, 'Report on Investigation into Malaria in the Union of S. Africa', *Journal of the Medical Association of South Africa*, vol. v, 1931; S. P. James, *Report on a Visit to Kenya and Uganda to advise on Anti-malarial Measures*, 1929; M. A. Barber and M. T. Ollinger, 'Studies on Malaria in Southern Nigeria', *Annals of Tropical Medicine and Parasitology*, vol. xxv, 1931; J. G. Thomson, 'Malaria in Nyasaland', *Proceedings of the Royal Society of Medicine*, vol. xxviii, 1935. ² See Chap. V, p. 139.

³ R. van Nitsen, *L'hygiène des travailleurs noirs dans les camps du Haut Katanga*, 1933; P. Reyntjens, Estas, de Feyter, et M. Sambon, 'Communications relatives aux indices splénétiques et malarieux et à la quénisation dans les camps de l'Union Minière', *Bulletin*

service in some towns, and notably Élisabethville, being highly organized. The prophylactic use of quinine has been applied extensively in the mining areas and among native children in the areas under *Foréami*.¹

In South Africa and the British colonial territories anti-mosquito measures on a large scale have been confined to the main townships. Elsewhere steps have been taken to break the mosquito-man-mosquito cycle of the parasite in European homes by the use of mosquito screening, mosquito bed-nets, and the use of insecticidal sprays. Outside the large towns anti-malarial measures, except on some estates employing much African labour and in the compounds of large mines, such as those on the Rhodesian copper-belt, are usually confined to endeavours to raise the resistance of the natives by improved social conditions. In certain native areas in Natal Dr. G. A. Park Ross has instituted malaria control by the weekly spraying of native huts with a preparation of pyrethrum, a method which is said to be effective.

(c) *Blackwater Fever*

Blackwater fever is closely associated with malaria, and rarely occurs where anti-malarial measures are carefully carried out. The type of malaria parasite with which it is associated is *P. falciparum*, and its distribution, therefore, is the same as that of malaria due to infection with this parasite. The disease is rare in Africans, but there is an increase in cases, possibly owing to the loss of immunity already referred to; it is often seen in Europeans living in poor conditions.

Various theories have been put forward from time to time to explain the cause of the disease, but none has been conclusive. Professor J. G. Thomson, of the London School of Hygiene and Tropical Medicine, studied the disease in Southern Rhodesia, and summarized the knowledge then existing;² his work was con-

médical du Katanga, 1931, no. 4, 1932, nos. 1, 3; J. Schwetz, H. Baumann, Peel and Droeshaut, 'Sur la différence de l'infection malarienne, d'après l'âge, constatée chez les nourissons noirs de l'agglomération de Stanleyville', *Rivista di Malarologia*, vol. xii, no. 6, 1933, pp. 1147-54.

¹ See below, p. 1178.

² 'Researches on Blackwater Fever in Southern Rhodesia', London School of Tropical Medicine, *Research Memoir Series*, vol. vi, 1924.

tinued from 1925 to 1929 by Dr. G. R. Ross.¹ A marked advance in treatment was made by the introduction of blood transfusion. The disease is, however, still of importance in many parts of tropical Africa, and is in need of further study.

(d) *Yellow Fever*

Epidemics of yellow fever, another mosquito-borne disease, have occurred with a high mortality in North and South America and in West Africa. Outbreaks occur in both the French and British colonies in West Africa from time to time, Liberia being a permanent reservoir, from which the disease can be carried to adjoining territories. Investigation by officers of the Rockefeller Foundation has shown that in Liberia the majority of children contract the disease, though the mortality rate among them is only 5 per cent.

As the cases are sporadic and the symptoms ill defined and various, there may be large areas where, if South American conditions are duplicated, cases of yellow fever are undetected. Blood tests made in Uganda and the Sudan reveal that a number of adult Africans in those countries are immune from yellow fever, and, according to present knowledge, immunity can only be acquired through an attack of the disease. Hence in 1936 the Rockefeller Foundation collaborated with the Uganda Government in investigating the position in that country and in the Anglo-Egyptian Sudan, the main aim being to find clinical cases of the disease. The Human Trypanosomiasis Institute at Entebbe has been taken over for yellow fever research.²

Most of the survey work on yellow fever has been done by the International Health Division of the Rockefeller Foundation. Until 1934 a yellow fever laboratory was maintained at Yaba near Lagos, and this has since been taken over as part of the Medical Research Institute of the Nigerian Government, and is assisted by a grant from the Foundation. The work carried out by these institutions, together with the blood tests made on blood sera sent in for immunity tests from various parts of tropical Africa, has

¹ 'Researches on Blackwater Fever in Southern Rhodesia', London School of Hygiene and Tropical Medicine, *Memorandum* 6, 1932.

² See below, p. 1166.

enabled a provisional map to be made indicating the probable limits of the endemic area of yellow fever. This area includes territory extending, on the west, from the Gambia, Sierra Leone, Liberia, the Gold Coast, and Nigeria, through French Equatorial Africa, and the northern and central portions of the Belgian Congo, as far east as the south-western part of the Anglo-Egyptian Sudan, and Uganda.

Other countries, particularly India and South Africa, have become aware of the possibilities of receiving infection from aircraft, through the transfer of infected mosquitoes or persons from the infected areas to countries where yellow fever has not hitherto occurred. Precautions are, therefore, being taken to reduce risks to a minimum by the provision of anti-malarial aerodromes and by thorough disinfection of the aircraft. Discussion of the position has taken place at both the health conferences held in South Africa.¹ The International Convention for the Sanitary Control of Aerial Navigation of 1933, which was prepared by the Permanent Committee of the *Office International d'Hygiène Publique*, has recently been widely adopted. Positive results obtained by mouse protection tests are not always accepted as proof that yellow fever is present in the 'silent' areas, and this emphasizes the need for proving the presence of clinical cases in these places.

In some of the towns where the disease has occurred, measures are taken for reducing mosquitoes. There are some notable examples of success; thus Freetown, in Sierra Leone, where yellow fever was prevalent, has had few cases since the introduction of a piped water-supply more than twelve years ago. In spite of all precautions there have been some calamities, notably the epidemic in Bathurst in 1934. In this outbreak the infective zone was in the European residential area, and subsequent investigations showed that the reported cases were but a fraction of those which must have occurred.

Preventive inoculation, started in America by Dr. W. A. Sawyer and his collaborators, is now being used on a large scale in South

¹ 'Report of the International Conference of Representatives of the Health Services of certain African Territories and British India, Cape Town, November 15-25, 1932', *Quarterly Bulletin of the League of Nations Health Organisation*, vol. ii, no. 1, 1933, and 'Report of the Pan-African Health Conference, Johannesburg, November 20-30, 1935', *Quarterly Bulletin of the League of Nations Health Organisation*, vol. v, no. 1, 1936.

America, and less extensively in West Africa; also in England by C. M. Findlay for officials and others going out to West Africa. Three methods are in use; that originally used by W. A. Sawyer, S. F. Kitchen, and W. Lloyd with modifications by A. Pettit and G. J. Stefanopoulo, the attenuated mouse-brain vaccine of J. Laigret, and the tissue-culture virus vaccine. There is little question that successful vaccination gives great protection against the disease, but inexplicable symptoms of an alarming character have occasionally been produced.

(e) *Sleeping Sickness*

Tsetse-fly is widely distributed throughout Central Africa, infected areas being found in the West Coast, in the Belgian Congo, in East Africa, and as far south as the Rhodesias. New patches frequently occur, as migrations of fly are frequent in areas in which it is hitherto unknown. It must also be realized that the spread of the disease must in many cases be associated with the opening of new communications and the development of trading facilities. This factor may be in some measure reduced by the increasing substitution of the motor car for portage,¹ but there is still a wide field for the diffusion of infection through the movement of natives along routes which have not come under protective schemes.

The same family of blood-sucking flies conveys both human and animal disease, and not only occasions widespread human suffering, but makes it impossible to keep cattle and other stock in large areas. Thus in Northern Rhodesia and Tanganyika approximately half the total area of the territories is unsuitable for domestic stock; there is a very considerable infected area in Southern Rhodesia; and in the Gold Coast Colony, Ashanti, and the Southern Provinces of Nigeria the main reason why there are no animals for transport, for manure, for meat supplies or for milk, is the prevalence of tsetse-fly and the disease which they convey.²

It has been mentioned that as a result of an epidemic of sleeping sickness which broke out along the shores of Lake Victoria Nyanza

¹ See Chap. XI, p. 629, and Chap. XXIII, p. 1538.

² Address by the Rt. Hon. W. Ormsby-Gore: *Report of the Second International Conference on Sleeping-Sickness, Paris, November 5th-7th, 1929*, pp. 14-19 (League of Nations Health Organisation, 1928). See also Chap. XIII, p. 932.

in the early years of this century, and which is believed to have caused the death of over a quarter of a million people, the Royal Society sent two commissions¹ to Uganda to inquire into the disease. Sir Aldo Castellani, of the first commission, detected a trypanosome in the cerebrospinal fluid, and Sir David Bruce, of the second commission, first concluded that the disease was due to infection with a trypanosome. Professor F. K. Kleine, in 1909, discovered that the trypanosomes underwent cyclical development in tsetse. Stephens and Fantham differentiated between *Trypanosoma gambiense* and *T. rhodesiense* in 1910, and in the following year A. Kinghorn and W. Yorke showed the cyclical development of *T. rhodesiense* in *Glossina morsitans*. These researches, together with the League of Nations International Commission on Human Trypanosomiasis of 1926² under Dr. H. L. Duke, have laid the foundations for a rational outlook on the disease and its control, and have stated the problems which still require solution. Broadly, it may be said that the facts now generally accepted are that human trypanosomiasis, or sleeping sickness, is due to the infection of man with either of two species of trypanosome, *T. gambiense* or *T. rhodesiense*: that these trypanosomes are conveyed by certain species of tsetse-fly (usually *G. palpalis* in the case of *T. gambiense*, and *G. morsitans* or *G. swynnertoni* in the case of *T. rhodesiense*), either by mechanical transmission, that is, the direct transmission of a trypanosome from one infected person to another, or by cyclical transmission, after the trypanosome has undergone a certain part of its cycle of development in the tissues of the tsetse-fly. The latter is the more usual method, the former is probably a rare occurrence. *T. rhodesiense* causes a more acute disease for man than *T. gambiense*, and one theory of the development of human trypanosomiasis is that both parasites are altered forms of *T. brucei*, the cattle and game trypanosome, which normally dies when introduced into man, but which, so the theory postulates, can become pathogenic to humans when resistance is low, and once it has established itself can be passed from man to man by cyclical transmission in the tsetse fly. Holders of this theory believe that *T. gambiense*

¹ Royal Society: *Reports of the Sleeping-Sickness Commission*, 1903-8, 1910-14, 1915.

² *Interim Report of the International Commission on Human Trypanosomiasis*, 1927; *Final Report*, 1928.

is *T. brucei* which has been greatly modified by long-continued passage from man to man by cyclical transmission through the tsetse-fly. *T. rhodesiense*, on the other hand, is a more recent parasite of man, and it has been thought that even to-day new strains of *T. rhodesiense* are being developed from *T. brucei* of game. There can now be very little doubt that wild animals are a reservoir for *T. rhodesiense*. Although *T. rhodesiense* has been shown to survive in transmissible form in bushbuck for two and a half years, it is open to doubt whether the complete destruction of game of every description, in order to eliminate every possible vector, is in practice feasible. The object of the steps taken in Southern Rhodesia for the killing of game is mainly to limit the range of infection, and prevent access to an area of European settlement.¹

G. palpalis has entirely different habitats from *G. morsitans* and *G. swynnertoni*. The former lives in riverine bush for the most part, while the latter is a dweller in savannah country. Control measures are, therefore, not the same, though the object of both is to break the contact between the tsetse fly and man. The first attempt at control was made at the time of the great epidemic, when the whole Uganda population of the islands and shores of Lake Victoria Nyanza was evacuated to a safe distance from the tsetse-infested area. The measure was successful, and the tsetse fly which still infested the ravaged area eventually lost the trypanosome infection. To-day reoccupation of some of the islands and lake shore is taking place, so that man and tsetse fly are again in close contact, but as the introduction of a case of trypanosomiasis might be sufficient to begin another epidemic strict control of reoccupation is maintained. Elsewhere the fight against *T. gambiense* is directed to the breaking of contact; thus, tsetse-free watering and washing places are provided on infested rivers, and the need for the people to visit tsetse-haunted bush for firewood and building poles is lessened by planting eucalyptus or other quick-growing trees near villages, and by the introduction of clay bricks as a standard material of house construction. Extensive clearings of bush along tsetse-infested rivers have facilitated the isolation of blocks of infested bush from which the fly can be eliminated by trapping and hand-catching. This method has been carried out with success

¹ See Chap. XIII, p. 932.

in Kenya and on a smaller scale in Uganda. In Tanganyika Territory experiments have been carried out as to the best method of control of *T. rhodesiense*, a considerable organization, developed under the charge of the late Mr. C. F. M. Swynnerton,¹ having been maintained for some years at Shinyanga for this purpose by the Tanganyika government, with the assistance of a grant from the Colonial Development Fund.² In some districts the customary yearly burning of grass and bush has been controlled so that a large area should be burnt at one time, and the fly destroyed. Extensive clearing of bush has also taken place, while in other parts dense tree-barriers have been planted to prevent, or at least hinder, the movement of fly. These methods are reported to have been successful. In order that land cleared of bush should remain free of fly, scattered populations have been concentrated in the middle of reclaimed areas, and encouraged to cultivate in a centrifugal direction so as gradually to occupy extensive tracts of country.³

In the British East African territories, the attempt to deal with sleeping sickness may be said to have followed a double course, combining an attack on the habitat of the fly with the treatment of infected persons. It will be realized that the former line of attack is not limited to attempts to reduce the range of fly responsible for human trypanosomiasis, but extends also to measures designed to protect domestic animals. It involves a comprehensive study, on the entomological side, of the habits of the fly, and on the botanical side, of its vegetal habitat; it uses a great variety of methods, many of which require the co-operation of Africans, since they involve not merely the use of large bodies of labour, but occasionally the transfer of considerable native populations. In this work Tanganyika, and some other territories, rely largely on the assistance of the native administrations. In Uganda some use has also been made of the Sleeping Sickness Ordinance and Rules.⁴

It is perhaps the difficulty involved in these operations, and some uncertainty as to their efficacy, which has decided other

¹ C. F. M. Swynnerton, 'Tsetse Flies of East Africa', *Transactions of the Royal Entomological Society*, vol. lxxxiv, 1936.

² See Chap. XXIV, p. 1624.

³ See *Report to the League of Nations on Tanganyika Territory*, 1937, pp. 18-21.

⁴ *Laws*, cap. 46, vol. iii, p. 167.

administrations to confine control to the treatment of infected persons, aiming by this means to secure a progressive expansion of trypanosome-free areas. This is, in the main, the system followed by the French, who found the Cameroons affected by an epidemic which seems to have begun just before the War; in 1926 they instituted a permanent sleeping-sickness mission, for medical treatment of the disease, and this is the method which is now normally adopted in the territory.¹ It is also, in the main, the method followed in the Congo, reinforced by rules restricting movement to and from infected areas. The early attempts to clear the bush could not be pursued owing to the nature of the country, and the administration resorted to purely medical treatment, using first atoxyl and afterwards tryparsamide. As will subsequently be seen, the method used by both the French and Belgians involves an attack on the seriously affected areas by mobile medical sections, and the taking of legal powers to restrict the movement of infected persons and to secure their receipt of the full course of prescribed treatment. The recent introduction of the Bayer 205 group of drugs has raised some hopes that trypanosomiasis might be eliminated, for if all infected persons were so treated as to cease to be infective for the tsetse fly, the disease must cease to be propagated. The detection of all cases is, however, impossible in African conditions, save by the use of an extreme measure of control.

An important contribution to the control of trypanosomiasis has recently been made by Dr. H. L. Duke, who has shown that an intravenous injection of Bayer 205 protects the individual from infection with trypanosomiasis for at least three months. This method of prophylaxis has been used in Uganda to protect prospecting parties in sleeping-sickness areas. The medical authorities in Tanganyika are opposed to it, for fear of replacing obvious infections with inapparent infections which might fail to be diagnosed until too late for cure. In the French and Belgian territories where sleeping sickness is present, treatment with Bayer 205 is used on a large scale by the *équipes de prospection et traitement*.² Nigeria is at present faced with the problem of dealing with a very widespread distribution of the disease, which in places

¹ *Bulletin de l'agence générale des colonies*, Oct.-Nov. 1926, p. 1317.

² See below, p. 1174.

has assumed epidemic form. A grant from the Colonial Development Fund has been made to finance a scheme of control by extension of the present method of inspection and treatment, under a plan which resembles that of the French and Belgian territorial organizations. Temporary field dispensaries have been set up in infected areas in the Northern Provinces at which inoculations are given. Attendance at these centres is voluntary, but the Nigerian Sleeping Sickness Ordinance,¹ applied to the Northern Provinces of both Nigeria and the Cameroons under British Mandate, makes provision for compulsory treatment if necessary, also the proclamation of areas in which restrictions on movement of persons and stock may be imposed. In the Togoland under British Mandate, where there is no compulsion, it is considered doubtful whether really satisfactory results can be achieved without resort to it.

(f) *Plague*

Bubonic plague is carried by fleas and is normally a disease of rats, and human plague occurs only when the infected fleas attack human beings; for instance, heavy mortality in rats may compel the fleas to feed on other hosts. Whereas in Equatorial Africa the house rat is the common carrier, in South Africa field rodents such as the striped mouse, the multimammate mouse, and the gerbille are mainly responsible. The fullest recent description of plague in South Africa is by Professor Ricardo Jorge.²

Rodents undergo periodic fluctuations in numbers, the population increasing to such a degree that there is a food shortage and weakening of resistance followed by disease. It seems probable that the South African field rodents normally fluctuate in numbers, like the voles and lemmings of the northern hemisphere, and are reduced in numbers every few years by diseases harmless to man;³ it now seems, however, that bubonic plague has so spread among them that it has to some extent replaced these natural diseases. Preventive measures in African conditions usually consist of the disinfection of huts in infected areas by cyano-gas, which kills the rats; sometimes, however, the older methods of burning huts or of remov-

¹ Ordinance 1 of 1937.

² 'La peste africaine', *Bulletin de l'office international d'hygiène publique*, vol. xxvii, 1930; supplement to no. 9.

³ E. B. Worthington, *op. cit.*, 1928, chap. xvi.

ing the roof and re-thatching and re-plastering are used. Cyano-gas has the advantages of leaving the hut intact and killing other parasites, whereas the destruction of huts discourages Africans from reporting cases. These measures are perhaps of more value in calling attention to the danger from rat-infested huts than in preventing the spread of disease, and it is clear that little progress can be made until the contact with rats is broken by improved conditions of housing and hygiene.

The possibility that the incidence of plague, in parts of Africa other than the south, may depend on fluctuations in numbers of rodents and their fleas has been considered likely in connexion with the outbreaks in East and West Africa.¹ The recent history of the disease in Uganda, where there was a rise in incidence in 1936, lends support to the theory.²

All the East African territories have reported at intervals outbreaks of the disease with sporadic cases in the intervening periods. A small endemic area of plague in the Belgian Congo at the south end of Lake Albert has been studied for some years, and there seems no sign that it is spreading or decreasing in extent.³ Endemic centres occur elsewhere in East Africa, notably in Tanganyika.⁴

In Angola the first outbreak of plague was in 1921 in Loanda, to which the disease was probably introduced from Lisbon. The epidemic rapidly reached a climax and then steadily decreased, perhaps as a result of the widespread burning of huts to destroy rats. Since 1932 the South African plague carried by rodents reached Angola, but there have been few cases, and desert conditions which are unfavourable to rodents may prevent its spread. Minor outbreaks have occurred in Portuguese Guinea, the Ivory Coast, the Gold Coast, and Southern Nigeria, where, however, there has been no case since 1933. The infection of Senegal from Dakar has been more severe, but the height of the epidemic was reached in 1924 and it has since died down to small proportions.

Causes of the spread of plague need more extended investiga-

¹ C. B. Symes, 'Notes on the Epidemicity of Plague', *Kenya and East African Medical Journal*, vol. vi, no. 12, 1930.

² Uganda: *Annual Medical and Sanitary Report*, 1930, p. 19, and E. N. Thornton, *Report on an Investigation into Plague in the Protectorate of Uganda*, 1930.

³ *Rapport annuel sur l'hygiène publique*, 1928, pp. 77 ff.

⁴ *Annual Medical and Sanitary Report*, 1931, pp. 7, 8.

tion: there is evidence¹ to show that the fleas infesting rats vary in number and species in town and country, and in stone and mud houses. Research is being carried out by Dr. Davis of the Wellcome Bureau at the Sir Alfred Lewis Jones Laboratory at Freetown, with a grant from the Royal Society of Medicine. Research on anti-plague inoculation has been carried out by Dr. E. P. G. de Smidt at the Medical Research Laboratory, Nairobi, and by Dr. J. H. Harvey Pirie at the South African Institute for Medical Research. Vaccines containing attenuated live plague bacilli have been advocated, but their use in Africa has not met with the same general acceptance as in India.

At the Pan-African Health Conference held in Johannesburg in 1935 the delegates agreed that methods of plague control cannot be standardized, especially in the case of rural areas, where circumstances must determine whether the attack should be against house or field rodents, or both, and whether it should involve vaccination of humans or not.

(g) *Relapsing Fever*

The characteristic symptom of the disease is high fever at regular intervals of about a week. The type known as tick fever, found in East and West Africa, is transmitted by a tick (*Ornithodoros moubata*), which is found in native huts and camping sites. Endemic in certain areas, especially along trade routes, it has sometimes reached epidemic proportions. In Uganda, at one time, all non-immune persons in prison in Ankole District inevitably contracted the disease. Control is dependent on tick eradication, and consequently on improved conditions of housing and hygiene. It is a frequent cause of illness among travellers, who, while they may have acquired a degree of resistance to the parasites infecting their own homes, succumb easily to the attacks of ticks in such places as rest houses.

Another variety of relapsing fever is that of which the vector is the body louse. It was endemic in French Guinea in 1921, and seems to have spread across Africa to the Sudan. The case mortality-rate among Africans is about 18 per cent., compared

¹ C. B. Symes and G. H. E. Hopkins, 'Notes on Fleas of Rats and other Hosts', Kenya Medical Department, *Records of the Medical Research Laboratory* (no. 1), 1932.

with from 1 to 5 per cent. in Europe,¹ and its spread in Africa is said to have been facilitated by the adoption of clothes.

(h) *Typhus Fever*

Much research on typhus fever has been done by Dr. A. Pijper in Pretoria, and a detailed account of the position has been given by Dr. E. H. Cluver.² There are three distinct typhus-like diseases in the Union, which are transmitted by ticks, rat-fleas, and lice. Tick typhus occurs chiefly in the low-lying region of the Transvaal, but cases are known in Southern Rhodesia and at the Cape. Rat-flea typhus is found among rats over an extensive area, though it is relatively uncommon among human beings; unlike plague, typhus does not kill the rats and hence the fleas do not often overflow to man. Louse typhus is the commonest type. Its incidence did not come into prominence until about 1919; from then until 1923 reported cases averaged over 8,000 annually, and although milder in South Africa than in Europe it is known to have caused 34,986 cases among Africans during the period 1923-35, resulting in 4,665 deaths; among Europeans in the same time there have been 686 cases with 32 deaths. The endemic area embraces about one-half of the Union, including the Transkei, Ciskei, and the Orange Free State. It is said that the rat-flea virus immunizes against tick typhus, but not against louse typhus; on the other hand, tick virus does not immunize against rat-flea typhus, but louse typhus immunizes against rat-flea typhus.³

Evidence in Kenya⁴ and in Uganda,⁵ where an outbreak of louse typhus occurred in the Kigezi District among a people clothed in sheep or goat skins, suggests that typhus fever may be present in East Africa to a greater extent than is at present known. Two

¹ 'Relapsing Fever from 1920 to 1930', *League of Nations Monthly Epidemiological Report*, 9th Year, no. 12, 1930, pp. 481-90.

² 'Le Typhus dans l'Union de l'Afrique du Sud', *Bulletin officiel de l'institut d'hygiène publique*, vol. xxvi, 1934, pp. 1531 ff., and 'Typhus and Typhus-like Diseases in South Africa', *Quarterly Bulletin of the League of Nations Health Organisation*, vol. v, no. 1, 1936, pp. 142 ff.

³ A. Pijper and H. Dau, 'South African Typhus', *Journal of Hygiene*, vol. xxxv, 1935, pp. 116 ff.

⁴ H. D. Tonking, 'Preliminary Observations on the Etiology of Kenya Typhus', *East African Medical Journal*, vol. ix, no. 6, 1932.

⁵ R. S. F. Hennessey, 'Typhus Fever in Uganda', *East African Medical Journal*, vol. xi, no. 1, 1934.

cases of the tick typhus have been reported from Uganda, but the louse-borne disease is said to be dying out as a result of a disinfector introduced for village use. The louse-borne type may exist in the Belgian Congo, since it was possibly from this territory that the disease reached Uganda.

(i) *Tuberculosis*

It is probable that tuberculosis was not prevalent to any great extent among African tribes in earlier times, but modern conditions, such as industrialization and urban life, have facilitated its increase, and it is now widely distributed.¹ In Africa, as in Europe, the disease is associated with poverty and overcrowding. In view of the apparent low power of resistance of Africans and the high mortality among African sufferers, the prevention of tuberculosis is among the more important health problems which engage the attention of governments and of employers of labour.

Since Professor Calmette in 1912 initiated the testing of West African natives with tuberculin, considerable information has been acquired as to the extent of the disease.² In some areas, usually those of dense population and with opportunities for contact with outside races, the infection rate is almost as high as in Europe, namely 80 to 90 per cent. of the adult population; in other areas, usually those of scattered population, or remote from outside influence, the rate is much lower, but may be as high as 50 per cent. of the adult population.

The susceptibility to tuberculosis of the Senegalese troops in France during the War attracted much attention; few had been infected before leaving Africa, and under war-time conditions in a non-tropical country, the inhabitants of which were relatively heavily infected, they were easily attacked by tuberculous disease, which took a much more fatal course than the usual type occurring in adult Europeans.³ There is little doubt that survivors returned to Africa and spread the disease, but the fact that no important

¹ See Union of South Africa; *Report of the Tuberculosis Commission*, U.G. 34, 1914.

² See *Interim Report on Tuberculosis and Sleeping Sickness in Equatorial Africa* and *Further Report on Tuberculosis and Sleeping Sickness in Equatorial Africa*, League of Nations Health Organisation, 1923 and 1925.

³ A. Borrel, 'Pneumonie et tuberculose chez les troupes noires', *Annales de l'Institut Pasteur*, mars 1920.

centres of infection seem to have been set up in the rural areas appears to indicate that the environment was unfavourable to its general spread. This view was confirmed by Professor S. Lyle Cummins in his investigation of the problem of tuberculosis in native mine-workers.¹ He held that the sunshine, comparative leisure, and certain customs found in African villages, such as that of burning the hut of a deceased person, militate against the extensive spread of the disease; also as diseased natives usually die after a short illness the period during which they may spread infection is limited. The spread of the disease is encouraged by overcrowding, such as that said to be caused by a hut tax, and in many places lack of timber has forced the natives to abandon house burning.

Although tuberculosis is usually found in overcrowded urban areas,² there are also extensive thickly populated rural areas which have high and increasing infection and disease rates. In Tanganyika,³ infection and disease rates vary directly with population density, suggesting that the major factor in the spread of tuberculosis is opportunity for contact with diseased persons.

In the South African and Rhodesian mines most African labourers are said to improve in health during their term of work, but unusual conditions of labour are often held to cause active disease where previous infection exists, and though medical inspection may be adequate there must often be a period, before diagnosis and isolation take place, when infection is spread. The importance of a period of acclimatization for newly recruited labour is now generally recognized.⁴

It has been shown that Africans are more sensitive to tuberculosis than Europeans.⁵ Post-mortem examinations also show that the type of disease resembles the acute rather than the chronic fibrous type usually seen in white races. The protective

¹ S. Lyle Cummins (Editor), 'Studies of Tuberculosis among African Natives,' *Reports to the Medical Research Council, 'Tubercle' Supplement*, 1935, pp. 7 ff. See also 'Tuberculosis in South African Natives', *South African Institute of Medical Research*, vol. v, no. xxx, 1932.

² R. J. Matthews, 'The State of Tuberculosis in the Protectorate of Zanzibar', *Reports to the Medical Research Council, 'Tubercle' Supplement*, 1935, pp. 48 ff.

³ C. Wilcocks, 'Tuberculosis in the Natives of Tanganyika Territory', *Reports to the Medical Research Council, 'Tubercle' Supplement*, 1935, pp. 31 ff.

⁴ See Chap. XI, p. 697.

⁵ S. Lyle Cummins, *op. cit.*, pp. 7 ff., 13.

reaction of the African's tissues appears to be deficient,¹ but on the other hand, the fact that many Africans are infected and do not become diseased, points to a considerable factor of resistance. In the Belgian Congo medical officers of the *Foréami* consider that individual resistance is increasing, and that the rule that every native patient must be isolated in hospital is of considerable value.² It is almost certain, however, that the natives' resistance to tuberculosis would be increased if their diet and living conditions improved.

There are large numbers of tuberculous patients in the Asiatic and European communities in Africa. The Indians of Zanzibar are heavily infected,³ and the same is undoubtedly true of Asiatics on the mainland.

Although tuberculosis has been found in cattle in Uganda,⁴ the French Sudan, and Tanganyika, human tuberculosis of bovine origin is believed to be rare in Africa. As in Europe, the principal form of tuberculosis is that of the lungs, which is not usually due to the bovine type of bacillus.

(j) *Leprosy*

While tuberculosis may be called a recent disease in Africa, tending to increase under the pressure of modern economic conditions, the leprosy bacillus (*Mycobacterium leprae*) would appear to have been with Africans since time immemorial, and the disease is prevalent among tribes which are comparatively unaffected by European contacts. It has been described as a disease associated with poverty, which should disappear with improved standards of living.⁵ The northern belt of Central Africa, from Nigeria to Abyssinia, is perhaps the most affected portion of the globe.⁶ About half a million cases of leprosy are already known in Africa, and the actual number may possibly be not less than a million. Leprosy is believed to be propagated by repeated contagion, and

¹ F. W. Vint, 'One Year's Post-Mortem Work on Natives of East Africa', *Kenya and East African Medical Journal*, vol. v, no. 2, 1929.

² Ordinance of Oct. 10, 1931.

³ R. J. Matthews, *op. cit.*

⁴ See *Annual Report of the Medical Department*, 1935, pp. 26-7, and *Annual Report of the Veterinary Department*, 1935, p. 18.

⁵ *Rapport sur l'hygiène publique au Congo belge*, 1934, p. 42.

⁶ W. H. Hoffman, 'Leprosy and the Cultural Development of Africa', *Africa*, vol. v, no. 4, 1932, pp. 455-63.

its spread would thus be favoured by conditions of African life, in which families live crowded together in comparatively small huts; the infection of families by everyday contact is said to be frequent.

Research has shown that the majority of cases in early stages can be arrested and even cured; advanced cases, though they may be improved, are usually intractable. Chaulmoogra oil and its derivatives are the principal drugs; ethyl esters have been used, especially in South Africa, with beneficial results, and gold preparations are valuable in leprosy affections of the eyes. In the prevention of leprosy, it is agreed that improvement of hygiene is the essential factor, and cases in a settlement have been arrested spontaneously, without any treatment, as a result of better conditions of life and nutrition. The segregation of persons suffering from the disease is considered of importance, and there are examples in various parts of the world where the disease has been completely eradicated from endemic centres by this means; the difficulty, however, of this course lies in the fact that sufferers do not always show visible signs of the disease and frequently highly infectious cases are not detected.¹ The British Empire Leprosy Relief Association, whose funds are derived largely from private sources, assists in establishing and equipping centres for treatment in British territories, particularly in Nigeria and Uganda. The Association, as a general rule, deprecates compulsory segregation of lepers, but encourages voluntary segregation by means of propaganda and grants, and emphasizes the necessity of measures being taken to prevent the infection of children. A committee of the Association and Toc H was recently set up, and sufficient funds obtained to train and support for five years in Africa a number of volunteers; five of these, later increased to seven, have been working in Nigeria since 1935 in close association with the Medical Department.

Legislation regarding leprosy varies from territory to territory; in some cases infectious lepers are compelled to enter special settlements, in others it is considered that compulsory isolation would encourage the concealment of cases.

In South Africa there are five principal institutions for leprosy, containing a total in 1937 of 2,270 persons, of whom 98 were

¹ W. H. Hoffman, *op. cit.*

Europeans, 97 coloured, 6 Asiatic, and the rest Africans. In addition 4,176 certified cases remained in their own homes.¹ In Basutoland a leper station, started in 1914, has a population of 684. Southern Rhodesia has two government leprosy hospitals at N'gomahuru and Mtoko, and a leprosy section subsidized by government is attached to the Mnene Medical Mission. As far as possible the patients live a normal life on large estates; the number of inmates increased from 508 in 1929 to 1,315 in 1936. The work has been assisted by grants from the Relief Association.²

In Nigeria and the Gold Coast,³ where leprosy is said to be virulent and increasing, special government organizations are established and much work is being carried out by medical missions, assisted by grants from the central government, the native administrations, and the Relief Association. Joint surveys in certain areas by government and mission doctors have revealed an unexpectedly high incidence. The average population of the leper colonies rose from 4,767 in 1934 to 5,116 in 1935; in addition some 2,380 lepers received treatment at native administration dispensaries in 1935. In Sierra Leone a recent survey of cases showed a total of 3,675, representing about 1 per cent. of the population. In Nyasaland twelve clinics are administered by missions, and receive grants from government in proportion to the number of cases treated. In 1936, 659 in-patients were treated in hospitals and 1,250 out-patients. Settlements at Dar-es-Salaam, Moshi, and Mkalama are controlled by the Tanganyika Government, which also gives assistance to mission settlements. The number of segregated cases in 1936 was 3,400.⁴ In Uganda a survey carried out in 1930-1 found the incidence ranged from 0.05 per cent. of the population in the Entebbe District to 1.26 per cent. in the Lango District. There are, in Uganda, three old-established colonies run by missions, and a new colony for able-bodied lepers started in 1934 which has now been taken over by the native administration. At each centre patients are supported by maintenance grants for the first year until they have established farms

¹ *Annual Report of the Department of Public Health, U.G.* 52, 1937, p. 38.

² *Report of the Public Health Department, 1936, C.S.R.* 23, 1937, p. 24.

³ *Report of the Medical Department, 1936, pp.* 8-9, 82-8.

⁴ *Annual Medical and Sanitary Report, 1936, p.* 36.

and become self-supporting; uninfected children are segregated from their parents as early as possible.

In French West Africa and in Togoland under French Mandate, a prophylactic campaign against leprosy has been organized in conjunction with a central institute for leprosy established in 1933 at Bamako, with research laboratories and a village housing over 300 patients, mostly from the Sudan and Ivory Coast. The institute has made the notable discovery that certain plants growing in the Ivory Coast and the Cameroons yield extracts which have effects on leprosy similar to the products of chaulmoogra oil. In French Equatorial Africa there is a leprosy village at Fort Lamy, and twenty-seven leper colonies have been established in the Cameroons under French Mandate. In some areas of the Belgian Congo the disease is particularly common, especially in Uélé-Népoko in Stanleyville Province, where a survey,¹ made in 1930, found in some parts as much as 12 per cent. of the population infected, and stimulated the *Croix Rouge du Congo* to start a campaign with financial assistance from the *Foréami*, the *Institut de Médecine Tropicale*, and the *Ministère des Colonies*. Against 28,000 cases treated in 1935, 57,000 were treated in 1936, and it is believed that on an average there are about 50,000 cases in the territory. The system followed for treatment is one of voluntary segregation in agricultural colonies where patients, as far as possible, live normal lives in villages and grow their own food. In the province of Stanleyville, for example, 71 leper villages had a population of 7,914 in 1936, and one settlement at Bibanga in the Lusambo Province had 455 inmates. A laboratory at Pawa in the same province, opened in 1934, is attached to a leper village and conducts leprosy research.

(k) *Yaws and Venereal Diseases*

The history of venereal diseases in Africa is obscure, but it is clear that syphilis was prevalent in East Africa before the European occupation; in Uganda, for instance, early medical missions found venereal diseases well established, and the infection was at that time commonly attributed to the Arabs. The slave trade also

¹ A. Dubois, *La lèpre dans la région Wamba-Pawa (Uele-Népoko)*, 1932.

contributed largely to their spread. In recent times the importance of these diseases has been accentuated by the grouping of large numbers of African men and women in urban and industrial areas, where they are removed from the restraints of tribal custom, and promiscuous intercourse, prostitution, and temporary 'marriages' with strangers are common. Again, the absence of large numbers of the male population from the villages in search of wages¹ has encouraged a lower standard of morality in the rural areas, and has facilitated the spread of venereal diseases. Ignorance of the true nature of these diseases and of the result of neglect is prevalent, and their treatment by native herbs and medicines, which effect a temporary improvement, makes Africans careless; women are particularly reluctant to present themselves for treatment. While it is not possible to form any estimate of the extent to which these diseases are prevalent, there is evidence of their existence in a very serious form in many areas. It has been mentioned that in 1908 it was said that in Uganda some 90 per cent. of the population had been at some time or another infected. This could have been only a conjecture, though the experience of the Church Missionary Society hospital at Mengo went to confirm the grave prevalence of the disease among the native women. The native government of Buganda at one time, indeed, attempted to make attendance at hospital compulsory, and in 1913 the Lukiko passed a law for this purpose. But the high incidence is not confined to Uganda; it has been calculated that the incidence of yaws and syphilis in East Africa is 60 per cent., and Northern Nigeria, the French Cameroons, as well as other western territories consistently report the wide spread of venereal diseases.

The necessity for action in towns and mine locations in this matter is now generally realized; clinics are provided in the more important centres, and treatment is given at a large number of mission and government hospitals. At the same time it would seem that there is a lack of accurate knowledge among medical authorities as to the distribution of the various diseases in this group. At present it is said to be difficult to distinguish between yaws and syphilis in African patients. In West Africa where, in general, gonorrhoea is more widespread in the southern territories

¹ See Chap. XI, pp. 699-709.

and syphilis and yaws in the northern, estimates of incidence range from 50 to 90 per cent. of the population. In Nigeria, where the population is estimated at about 20,000,000, cases actually treated in 1936 were:

	<i>Government hospitals and dispensaries</i>	<i>Native administration dispensaries.</i>
Yaws	110,588	83,342
Syphilis	18,432	32,671
Gonorrhoea	16,386	20,839

In 1936 the cases treated at government institutions in Tanganyika, where the population is about 5,000,000, were: syphilis, 23,484; yaws, 70,682; and gonorrhoea, 9,619. Compared with these the figures in Uganda, where the population is about 3,500,000, were: syphilis, 63,695; yaws, 62,240; and gonorrhoea, 14,101.

The symptoms of yaws are generally removed by a few injections. This fact is of much value to the medical worker in gaining the confidence of Africans, but it complicates the treatment of other diseases, since the hopes raised of similar results from injections for the quick cure of other complaints may lead to disappointment. Moreover, a cure is often assumed when obvious signs disappear. Hence for the venereal diseases, particularly gonorrhoea, which needs a long course of injections, treatment is seldom persisted in long enough to effect a complete cure.

At present there is no laboratory test to differentiate yaws and syphilis, since all known reactions for the two diseases are the same.¹ Doubt exists whether yaws can produce lesions of the brain and spinal cord as does syphilis.² It has been suggested that yaws may confer immunity against syphilis, and hence it may be inadvisable to complete the cure for yaws if the patient may thereby become susceptible to syphilis.³ There is, however, no

¹ J. A. Carman, 'The Relationship of Yaws and Syphilis: are they two diseases or one?' *East African Medical Journal*, vol. ix, no. 5, 1935; G. Mattlet, 'Syphilis et pian', *Bruxelles-Médical*, 1923, no. 46; T. F. Hewer, 'Some Observations on Yaws and Syphilis in the Southern Sudan', *Transactions of the Royal Society of Tropical Medicine and Hygiene*, vol. xxvii, 1934, p. 593.

² H. L. Gordon, 'Amentia in the East African', *Eugenics Review*, vol. xxv, 1934.

³ P. D. Connolly, 'Do Yaws and Syphilis confer Immunity against each other?', *Kenya and East African Medical Journal*, vol. vii, no. 12, 1931.

dispute that treatment which clears up cutaneous lesions leads to a reduction of incidence of the diseases in the next generation.

Perhaps the most systematic method of treatment has been adopted in parts of the French colonies. At Fort Lamy, for example, where the incidence of syphilis is put at 80 per cent. of the population, patients are given numbered metal discs which enable records to be consulted and facilitate the compilation of statistical data.

In the Belgian Congo the law obliges persons suffering from syphilis or yaws to present themselves at clinics at regular intervals so long as any sign of the infection remains.¹

(1) *Helminthic Diseases (parasitic worms)*

The importance of worm diseases in most African territories is now generally realized. In East Africa it has been established that over 90 per cent. of the population are infected with one or more kinds of worms, and frequently as many as six kinds have been found in the same individual.

Professor R. T. Leiper's department at the London School of Hygiene and Tropical Medicine has been prominent in revealing the life-histories and some of the pathological effects of worm infestation. Some species cause definite disease; for example, hook-worm (*ancylostomiasis*) produces a general anaemia and lowering of vitality; bilharzia (*schistosomiasis*) produces impairment of the functions of the liver and other organs, and, in serious cases, death from toxæmia; and certain tapeworms in the larval stage may be the cause of a kind of epilepsy. There can be no doubt that the general physical and mental activity of heavily infected persons is seriously affected.

The relation of these diseases to nutrition is important, and is still open to question. Certain parasitic worms appear to flourish in persons weakened by insufficient or unbalanced diet. On the other hand, heavy infestation in the African population may be a cause of malnutrition rather than an effect, and there are said to be several important worm infestations which are known to be uninfluenced by malnutrition. In certain cases feeding habits may cause infection, particularly in the case of peoples who eat

¹ See E. B. Worthington, *op. cit.*, chap. xvi.

raw meat and those who season their food with mineral salts collected from certain areas.

In Southern Rhodesia bilharzia is the most important helminthic disease. The incidence among the native population is believed to reach 50 per cent. in certain cases, and even for European children figures as high as 36 per cent. have been recorded. In the Union, propaganda and treatment campaigns have been organized by the Transvaal Bilharzia Committee in co-operation with School Medical Officers of the Education Department. In Northern Rhodesia it has been found that 31 per cent. of labour recruits for the Rhokana Corporation are infected with hookworm. Worm diseases are common in Nyasaland; in one village in Kuweraza District 100 per cent. of the people examined proved positive. That the drainage factor may play an important part in determining the incidence is suggested by the returns from mountainous and well-drained places, such as Mlanje and Zomba, which show 22.2 to 28.3 per cent. of hookworm infestation compared with 53 and 64 per cent. in Port Herald and Karonga, which are both low-lying and poorly drained. In Northern Nyasaland a heavy child mortality was traced to intestinal infection by worms resulting in cirrhosis of the liver. In Tanganyika Territory helminthic diseases account for 19 per cent. of diseases and 34 per cent. of deaths at government institutions. In Kenya, perhaps the most complete data on hookworm infestation recorded among a backward people were obtained in the Digo District in 1927-8. A selected village was subjected to detailed study at the end of the dry season, when infection should have been at its lowest, and it was found that every individual was infected, the average number of hookworm eggs being 466 per cubic centimetre of faeces.¹ Worm diseases are also very prevalent on the west coast, and it is said that in some areas infection by one or other form of helminthic disease is almost universal.

The remedial measures against these diseases, especially hookworm, depend largely on an improved standard of living, and on the maintenance of sanitary conditions. Difficulties in persuading Africans in rural areas to construct and use latrines are

¹ H. D. Tonking, 'Ancylostomiasis in Digo District', *East African Medical Journal*, vol. xi, no. 5, 1935.

well known to Administrative Officers, but much can be done if the native authorities are interested, and in this connexion the efforts now being made to train Africans as sanitary or health assistants are of importance.¹

(m) *Typhoid Fever*

Typhoid and paratyphoid infections are prevalent in most parts of Africa. It is commonly said that Africans do not suffer from them to the same extent as Europeans, but authorities in the Belgian Congo have noticed severe epidemics of typhoid among the natives of that territory. Diagnosis is by no means satisfactory on account of irregular symptoms, and the incidence is said to be higher than is generally supposed. Inoculation against these diseases has reduced much of the risk to Europeans.

(n) *Silicosis*

Silicosis, miners' phthisis, or 'rock drill fever' as it is sometimes called, is an occupational disease prevalent among miners in the Union of South Africa and in Southern Rhodesia: it has been defined as 'a more or less generalized fibrotic state of the lungs due to the inhalation of hard, flinty particles'.² The disease is chronic and generally progressive, but, although not infectious, it often leads to tuberculosis. Both European miners and native labourers are liable to the disease, but Europeans exhibit a higher incidence of simple silicosis, while natives, owing to their greater susceptibility to tuberculosis, show a rate of silicosis combined with tuberculosis which, in spite of their shorter period of service underground, is more than twice that of European miners. Silicosis has been recognized as a serious problem in South African mines for about forty years, and in the last twenty-five years much research has been carried out,³ as a result of which it has been possible to distinguish between 'simple' or uncomplicated

¹ See below, p. 1182.

² A. Balfour and H. H. Scott, *op. cit.*, p. 287.

³ See, for example, *The Prevention of Silicosis on the Mines of the Witwatersrand, being Report on the Investigations of the Miners' Phthisis Prevention Committee*, 1937; F. W. Simson, A. S. Strachan, and L. G. Irvine, *Silicosis in South Africa*, reprinted from *Proceedings of Transvaal Mine Medical Officers' Association (Special Supplement)*, 1930; A. Mavrogordato, *Contributions to the Study of Miners' Phthisis*, Publications of South African Institute for Medical Research, 1926, no. xix; *General Report of Miners' Phthisis Committee*, 1916, Appendix no. 6.

silicosis and silicosis accompanied by tuberculosis (the true miners' phthisis) or other infections.¹

In the Union of South Africa, from 1902 onwards, various commissions inquired into the causes of the disease and the provisions made for compensation, and in 1911 legislation was introduced providing for compensation to miners of both races.² Act 35 of 1925 consolidated previous legislation regarding both preventive measures and compensation, and the administration of the law is now vested in the Miners' Phthisis Board, and the Miners' Phthisis Medical Bureau under the Ministry of Mines. From 1919 to 1937 mining companies contributed a sum of £18,712,098 to the Board, and in 1935-6 the Miners' Phthisis Compensation Fund had a revenue of £1,053,258 and expenditure of £768,144 (the employers' contribution being £800,000). From May 1911 to March 1937 an aggregate amount of £16,803,828 was paid out to miners and mine inspectors; in the period August 1912 to March 1937, £1,130,309 was paid to native labourers, and £59,984 during 1936-7.³

Active measures to combat the disease aim at securing miners of good physique, at early detection of the disease, and at providing generally improved working conditions. A high standard of physical fitness is secured by means of an examination of all mine recruits before engagement; further examinations are held at six-monthly intervals, and miners in whom the disease is found are required to cease work underground. Africans are also subject to examination on termination of their contracts; the task is of considerable magnitude, as in 1934-5, for example, there were 255,816 African employees, of whom 198,193 were in underground service, and about 90 per cent. of the labourers are replaced annually. In 1934-5 the prevalence rate per 1,000 of simple silicosis among native labourers in the Union was 1.22; of tuberculosis with silicosis 0.75, and of tuberculosis alone 2.48; it compares favourably with the rates of 1925-6 which were respectively 1.13, 2.45, and 3.16.⁴ As many of the African miners in both the Union

¹ *Report of the Miners' Phthisis Medical Bureau for the three years ended 31 July, 1935*, U.G. 46, 1936, pp. 11 ff.

² Act 34 of 1911.

³ *Report of the Miners' Phthisis Board, 1 April, 1936-31 March, 1937*, U.G. 49, 1937.

⁴ *Report of the Miners' Phthisis Medical Bureau, etc.*, op. cit., U.G. 46, 1936, p. 55.

and Southern Rhodesia come from other territories and return home after the expiry of their contract, there is a serious risk that infected persons may spread tuberculosis in their home villages. The incidence rate among Europeans was 1.92 per cent. in 1920-3, 1.94 per cent. in 1927-8, and fell to 0.88 in 1934-5: general liability has diminished by 64 per cent.¹ Among both races there has been a decline in the liability to contract the disease, but apparently it is still liable to show itself after lengthy periods of service. Cases continue to occur among the miners of picked physique, and it seems as if medical preventive measures had done their utmost, and that further research must be directed towards the improvement of working conditions so as to exclude the harmful silicosis dust. It has been stated that progress has been made in this direction.² An International Conference on Silicosis was held at Johannesburg in 1930.

Miners' phthisis has also been a serious question in Southern Rhodesia for many years, though the position appears to be improving. During 1935-6 an inquiry was held into the incidence of silicosis and pulmonary tuberculosis among mine employees; as a result some improvements have been made, principally in early diagnosis, and in the provision of free X-ray facilities.³ A further inquiry was recently undertaken, but the report is not available.

It seems that the disease has not been detected among the natives working in the Northern Rhodesian copper mines. Elsewhere it is found on the Gold Coast, and an investigation into the incidence of silico-tuberculosis is to be carried out in connexion with the deep-mining area at Tarkwa.

(o) *Other Diseases*

In addition to the diseases discussed above, many others play a large part in the morbidity and mortality of African natives. Pneumonia is a frequent cause of death, and is especially prevalent where there is a strong contrast in the seasons, and among Africans who are exposed to unaccustomed conditions of labour, such as in the mines. In one district in Northern Rhodesia lobar pneumonia in the elderly and broncho-pneumonia in

¹ *Report of the Miners' Phthisis Medical Bureau for the three years ended 31 July, 1935*, U.G. 46, 1936, p. 2.

² *The Times*, Dec. 24, 1936.

³ *Report of the Public Health, 1936*, C.S.R. 23, 1937, p. 28.

the young are said to be the most frequent causes of mortality. Smallpox is present, to a varying degree, in different territories; vaccination is being more largely employed and should eventually control the disease. Measles, which has probably been introduced recently, sometimes produces serious symptoms among the African population. Epidemics in South Africa and the mining areas of Rhodesia have caused alarm in recent years. Dysentery, both amoebic and bacterial, remains the cause of considerable morbidity. Malignant diseases exist, but no conclusions can yet be drawn from the number of cases treated, as, with the growth of native confidence in European surgery, it is probable that hospital returns may show an apparent increase. The study of malignancy in the tropics has been advanced in a series of publications by the pathologists of Nigeria,¹ and elsewhere.

The question of the treatment of mental disorders among Africans is receiving increasing attention. Until recently, in many areas where other facilities were lacking, it was customary to confine difficult cases in the ordinary jails,² or put them in charge of relatives. A certain number of mental institutions have now been opened, such as the Mathari Mental Hospital at Nairobi, the institution at Ingutsheni in Southern Rhodesia, the mental hospitals at Dodoma and Intendi in Tanganyika, and the Colonial Asylum at Accra, which housed in 1936 as many as 445 cases. In Uganda a mental hospital was opened in 1936, but in some other territories the provision remains inadequate or does not exist: thus in Nigeria the visit of an expert alienist is awaited before any change is made in the present position. Some inquiry, but on a limited scale, has been made into the question whether any change in the incidence of mental disorder among Africans can be traced to the impact of European civilization. The investigations made on this subject at the Mathari Mental Hospital in Kenya, sometimes quoted in discussion on the 'backwardness' of Africans,³ were on too small a scale to be conclusive.

¹ E. C. Smith and B. G. T. Elmes, 'Malignant Disease in Natives of Nigeria: an analysis of five hundred tumours', *Annals of Tropical Medicine and Parasitology*, vol. xxviii, no. 4, 1934.

² See Chap. VII, p. 313.

³ See Chap. II, p. 36; also see Kenya, *Medical Department Annual Report, 1935* (pp. 5, 8-9), for a more detailed discussion of the possible effects of new social strains on the incidence of mental diseases.

One of the major problems confronting those engaged in health work in Africa is the lack of information as to the real incidence and extent of disease among natives. The population figures are frequently unreliable,¹ and the returns published in departmental and other reports, of cases treated in hospitals, dispensaries, mission stations, or by mobile units, bear little or no relation to the total amount of ill health which is suspected to exist, the extent of which is based on estimates only. Serious outbreaks of epidemic and infectious disease are obvious, but much fuller information is needed on general health before any conclusions can be arrived at as to the incidence of disease or as to the extent to which it is being checked or controlled by state and other health services. Valuable work has been done by intensive surveys in restricted areas, some of which have been noted, and the policy pursued in the Belgian Congo of conducting intensive campaigns in defined areas would seem to promise tangible results, both in the compilation of accurate information and controlling ill health; an extension of this method in other areas might well be undertaken. The recent report² on Northern Rhodesia stresses the need for accurate surveys in that territory especially, but the need is urgent throughout Africa; the present efficiency of services and plans for future development alike require a basis of reliable information.

III. INTERNATIONAL ORGANIZATION OF HEALTH WORK

International work in health and medicine has been organized since 1907, when the *Office International d'Hygiène Publique* was established. It has a permanent committee, representing fifty-three governments and including delegates from a number of African territories, and a permanent secretariat in Paris. Its activities cover a wide field, but are concerned primarily with the prevention of particular infectious diseases by international sanitary conventions. The recent International Convention for the Sanitary Control of Aerial Navigation has special reference to Africa.

The Health Section of the League of Nations consists of a

¹ See Chap. IV, pp. 104 ff., and E. B. Worthington, *op. cit.*, chap. xvii. Also W. M. Macmillan, *op. cit.*, p. 41.

² *Report of the Commission on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, pp. 293 ff.

General Advisory Health Council which has the same membership as the committee of the *Office International d'Hygiène Publique*, a Standing Health Committee, and the Health Section of the League Secretariat. The work carried out under its auspices on such subjects as sleeping sickness, malaria, tuberculosis, leprosy, and public health services has been of great value to Africa. The Permanent Commission on Biological Standardization, also appointed by the Health Organization of the League of Nations, held a conference at Geneva in 1935 and had as its main objects the spread of knowledge regarding international standards and the establishment of national centres for this purpose. It influenced the formation of a new Biological Control Laboratory in Capetown for work on the standardization of vaccines and sera. Dr. M. D. Mackenzie, of the League Health Organisation, undertook two missions to Liberia¹ and Dr. Anigstein² has carried out a survey of the people. The results of activities of this nature are published in the *Quarterly Bulletin of the Health Organisation*, and the three-monthly *Epidemiological Reports* and the weekly *Epidemiological Record* include statistics and data from many countries.

The International Conference of Representatives of the Health Services of African Territories and British India, held at Capetown in November 1932, under the auspices of the League of Nations and the *Office International*, was attended by representatives of all the principal British territories, and of Angola and Moçambique. The Pan-African Health Conference, held at Johannesburg in November 1935, included representatives of the French and Belgian colonies; the subjects discussed at these conferences included the training of native medical subordinate personnel, the transmission of disease by aircraft, measures against plague, and research in animal diseases.³

The International Health Division of the Rockefeller Foundation has been connected with Africa chiefly through its work on yellow fever, to which reference has been made above.⁴

¹ *Report on Mission to the Kru Coast*, League of Nations, C. 662, M. 319, 1932.

² L. Anigstein, *First Report on the Medical Survey of Liberia*, 1936; *Second and Third Reports*, 1936, and 'Medical Exploration in Liberia', *Quarterly Bulletin of the Health Organisation of the League of Nations*, vol. vi, no. 1, 1937, pp. 93-127.

³ *Quarterly Bulletin of the Health Organisation of the League of Nations*, vol. ii, no. 1, 1933; vol. v, no. 1, 1936.

⁴ See above, p. 1127.

The Epidemic Intelligence Bureau at Singapore, established after a conference at Singapore in 1925, held under the auspices of the League of Nations, receives telegraphic reports regarding epidemic diseases from a number of countries, including the East Coast territories of Africa and the Union, and transmits a weekly summary to all countries concerned.

The International Missionary Council, with headquarters in London, is composed of representatives of a large number of Protestant missionary societies, and in view of the number of hospitals and health centres supported by missions, it must be included in a survey of international organizations assisting in improving health in Africa. There is also in London a British Advisory Board on Medical Missions.

IV. ORGANIZATION OF HEALTH SERVICES IN BRITISH TERRITORIES IN AFRICA

(a) *Union of South Africa*

In the Union, a separate government department, the Ministry of Public Health, was established in 1919, and medical and health work is under the general control of the Secretary for Public Health of the central government.¹ Private practice is fully developed and the hospitals depend to a large extent on part-time work by practitioners and specialists. The provision of hospital facilities is mainly the responsibility of the provincial governments, which afford very considerable financial assistance. For certain purposes, such as the control of sanitation and outbreaks of infectious diseases, most municipalities have health officers and health departments, but the scope of these organizations varies so much in the absence of uniform legislation that it cannot be summarized. In most districts medical officers, mostly part-time, known as District Surgeons, are employed by government for the treatment of indigent persons; in June 1937 these numbered 363, of whom 340 were part-time. The Rand mines employ a large number of doctors and have their own hospitals and dispensaries.

¹ *The Official Year Book of the Union of South Africa*, 1934-5, gives a full account of medical facilities: and earlier issues contain a summary of the history and development of the health administration.

A Committee of Inquiry,¹ recently appointed by the Minister of Public Health, recommended that, as regards the European population, compulsory health insurance should be instituted in urban areas, and that the number of District Surgeons in rural areas should be increased, using where possible the services of doctors residing locally; while in the native areas, where medical services are inadequate for the needs of the population, a general extension is recommended, including a larger staff of doctors, an African nursing service, and a system of health visitors. There are in the Union 544 hospitals (including private nursing homes, maternity homes, and mine and factory hospitals), of which 260 are for Europeans only and 122 for non-Europeans only. They include 9,413 beds for Europeans and 15,372 for non-Europeans, but it is noteworthy that more than half the hospitals for natives, and nearly half the beds, are maintained by the mines and factories. The patients treated in 1937 were 172,555 Europeans and 326,128 natives, but of the latter 198,177 were treated in mine and factory hospitals. There is, in proportion to the non-European population, a relative lack of hospital accommodation for natives, other than those for whom the mines and factories provide; and the system under which 340 of the District Surgeons out of a total of 363 are part-time only, inevitably means that natives in the reserves, and indeed in many other areas, are dependent on attendance at the hospitals for medical facilities.

Besides devoting attention to the problems of silicosis and tuberculosis, the South African Institute for Medical Research at Johannesburg is carrying out investigations in connexion with plague, pneumonia, meningitis, and other bacterial diseases, and it has a field research station at Eshowe in Zululand for the study of malaria. The expenditure on the Institute for the year 1935-6 was £70,013, contributed partly by the government and partly by the gold-mining companies. The University of Witwatersrand Medical School also conducts research, in close association with the Institute.

The Research Grant Board of the Union, instituted in 1918, advises the government on medical and other research and

¹ *Report of the Departmental Committee of Inquiry: National Health Insurance*, U.G. 41, 1936, pp. 71-2.

administers all government grants-in-aid. The South African Association of Private Laboratories was recently inaugurated to promote co-operation and has encouraged such valuable research work as that on typhus.

(b) South-West Africa

In South-West Africa the medical service is controlled by the Medical Officer of the administration, stationed at Windhoek, and there are one whole-time and fourteen part-time District Surgeons appointed on the same basis as in the Union. There are five state-aided hospitals for Europeans, three Roman Catholic mission hospitals for Europeans and natives; the Rhenish, Anglican, and Finnish missions also maintain hospitals and medical stations. Otherwise, medical services for Africans appear to be restricted to three state-owned native hospitals with a total of 103 beds. In 1936, government institutions treated 926 European and 1,686 non-European in-patients, and 203 European and 5,631 non-European out-patients. Public health expenditure amounted to £23,831 out of a total ordinary expenditure of £731,802.

(c) Basutoland

In Basutoland medical work began in 1844 as a result of French missionary activity, but until Dr. E. C. Long was appointed Principal Medical Officer in 1894 there was little advance. The medical system in 1936 included eight government hospitals with twelve European and 148 native beds, giving a figure of one hospital bed for every 4,000 of the coloured and native population. The staff consists of a Principal Medical Officer, ten Medical Officers stationed in out-districts and one as relief, one District Surgeon and the medical superintendent of the leper settlement; there are also fourteen European staff nurses and five matrons. The African staff included in 1936 an assistant medical officer, ten dispensers, one qualified nurse, and thirty-eight unqualified nurses and attendants. The health service in rural areas is poorly developed, as the existing staff is only sufficient to deal with hospital work. In 1936 in-patients of all races numbered 3,298 and attendances at government dispensaries 82,952. Expenditure amounted to £48,932 out of a total ordinary expenditure of £294,883.

(d) Bechuanaland

In Bechuanaland the staff in 1936 included a Principal Medical Officer stationed at Mafeking and eight other government doctors; there were also four subsidized mission doctors and one other subsidized doctor. The hospital system consisted of three government hospitals at Lobatsi, Serowe, and Francistown, each with some four beds for Europeans and twenty for natives, four smaller mission native hospitals, and one more hospital for natives which is in course of erection (1937). The service appears to be insufficient even for curative work, especially in the west and north of the territory where practically no medical assistance exists, and there is a need for dispensaries and for trained native nurses and native subordinate staff.¹ A sanitary inspector has been appointed for work in village conditions as a first step to preventive work. In 1937 two travelling dispensary units, each consisting of two lorries, a Medical Officer, and African dispensers, were provided to tour outlying districts.² In 1936 the hospitals admitted 1,751 in-patients and there was a total of 70,933 attendances (27,196 being first attendances) at government and medical-mission hospitals and out-stations. Government expenditure was £20,126 out of a total ordinary expenditure of £167,310 in the year ending March 1937.

(e) Swaziland

In Swaziland there was little medical work before 1926, when the Nazarene Mission established a hospital at Bremersdorp and the Wesleyan Mission started a hospital at Mahamba. A government hospital was established at M'Babane in 1931, and there are now four government hospitals, two for Europeans and two for Africans, with 20 beds for Europeans and 125 for Africans. The European staff consists of two mission doctors and four government doctors. The provision is still inadequate for natives, especially in the rural areas, which are served by a few small dispensaries. It has been suggested that it would be more practical to enlarge the scope of the mission work by government grants rather

¹ *Report of the Commission on the Financial and Economic Position of the Bechuanaland Protectorate*, Cmd. 4368, 1933, pp. 72-7.

² *Official Year Book of the Union of South Africa*, 1937, p. 1250.

than to expand the government establishment.¹ The last return from Swaziland gave 2,416 in-patients and 30,591 out-patients; expenditure was £14,892 out of a total of £131,537.

(f) *Southern Rhodesia*

In Southern Rhodesia medical and health services have, since 1923, been controlled by the Public Health Department. Private practice has become well established and many private doctors aid in the work of the hospitals. There are well-equipped hospitals with accommodation for Europeans and other races at Salisbury and Bulawayo and smaller hospitals in eight other towns. Africans are further provided for by six small hospitals and two government institutions for the accommodation and treatment of lepers. The larger mining companies maintain special hospitals for their employees. There are, however, about 800,000 natives living in reserves or on unalienated Crown land where there is only a limited number of medical missions subsidized by the government.² To meet this situation progress has been made in the last few years in the establishment of a network of medical dispensaries throughout the native reserves. The aim is eventually to have a series of small base hospitals, each surrounded by a ring of dispensaries; the dispensaries are staffed by trained native orderlies, where possible under the administrative supervision of the local Native Commissioner, and are in most cases served by the local government Medical Officers. In many areas missions co-operate and maintain clinics.

The government laboratory at Salisbury is the chief centre of research, and, among other studies, work on the anaemias as they exhibit themselves in the European and in the native inhabitants of the country has been carried out. The Bulawayo Bacteriological Institute, established in 1930 and subsidized by government, became, in 1936, an entirely government institution with the name of the Public Health Laboratory, Bulawayo; its work has hitherto consisted mainly of routine examinations.³ In 1937 government hospitals provided 580 beds for European and 1,111 for Asiatic

¹ *Report of the Commission on the Financial and Economic Position of Swaziland*, Cmd. 4114, 1932, pp. 54-8.

² *Report of the Public Health*, 1935, C.S.R. 14, 1936, p. 11.

³ *Report of the Public Health*, 1936, C.S.R. 23, 1937, p. 42.

and African patients, and treated 8,040 European and 13,704 Asiatic and African in-patients; out-patients were 22,685 and 44,521 respectively. The staff included 46 Medical Officers and 271 nurses, and 506 African assistants. Departmental expenditure was £252,573 out of a total government expenditure of £3,456,704.

(g) *British Colonial Dependencies*

The Secretary of State is advised by the Chief Medical Adviser and by the Colonial Advisory Medical Committee,¹ which examines the annual medical reports from the colonies and maintains contact with similar advisory committees on education, agriculture, and animal health, in order to correlate policy. In 1934 the medical services of all the dependencies were unified into the Colonial Medical Service, a change which has rendered the transfer of officers from one dependency to another easier and more frequent.² The medical staff at the Colonial Office consists of a Chief Medical Adviser and an Assistant.

The London School of Hygiene and Tropical Medicine is a training-ground for colonial workers, and a centre of research in entomology, protozoology, and helminthology, as well as in clinical medicine, while the recent incorporation of the Ross Institute has created a section for the investigation of practical methods of dealing with tropical health problems.

The Bureau of Hygiene and Tropical Diseases is maintained by the Colonial Office at the London School of Hygiene and Tropical Medicine, and has as its principal function the collection of information regarding hygiene and tropical diseases. It publishes information and abstracts of important technical papers in several languages in two monthly periodicals, the *Tropical Diseases Bulletin* and the *Bulletin of Hygiene*. From 1931 onwards a Supplement to the *Tropical Diseases Bulletin* has been published, consisting of summaries of the medical and sanitary reports from British territories. The Imperial Agricultural Bureau publishes a group of journals covering practically all the sciences touching agriculture; those on entomology and nutrition also cover medical entomology and

¹ See Chap. VI, p. 161.

² *Dominions Office and Colonial Office List*, 1936, p. 596.

human nutrition, and are of considerable importance in connexion with Africa. The Bureau of Nutrition, at the Rowett Institute, Aberdeen, abstracts the literature on nutritional subjects. The Nutrition Committee of the Economic Advisory Committee was set up to study and advise on the problem of nutrition.¹

The Liverpool School of Tropical Medicine is an important headquarters of training and research, especially in relation to the West African colonies. The School has sent expeditions to Africa, and maintains the Sir Alfred Jones Laboratory at Freetown.² The Director, who is also consulting pathologist to the Government of Sierra Leone, is assisted by two or more experts. The staff has undertaken a survey of diseases and parasites in West Africa.

The Medical Research Council, maintained by government, supports a malarial research unit at the London School of Hygiene and Tropical Medicine for the study of anti-malarial drugs; it finances work of a similar nature at the Molteno Institute at Cambridge. It has created two research fellowships on tuberculosis in Eastern Africa; and has instituted an inquiry into the nutritional problems of Nigeria. The Council intend to establish permanent posts for research in tropical medicine,³ the holders of which will work partly in the tropics and partly in British institutions to which they will be attached. The first stage has been the creation of tropical research fellowships, of which two junior and two senior have already been awarded. The Tropical Medical Research Committee, an advisory body including representatives of the Medical Research Council, the Colonial Office, and the Liverpool and London Schools of Tropical Medicine, has been formed in connexion with the extension of research in the tropics, and has issued publications in 1928, 1929, and 1935 on the state and progress of medical research in the colonies, dependencies, and mandated territories.

In general it may be said that since the reorganization of the Colonial Medical Service in 1934 each British territory has had a

¹ See Chap. XXIV, p. 1618, and E. B. Worthington, *op. cit.*, chap. xvii.

² See above, p. 1136.

³ *Report of the Medical Research Council, 1936-7*, Cmd. 5671, 1938, p. 159.

Medical Department controlled by a Director who is usually assisted by a deputy director and, where the work justifies it, by an assistant director. In the larger towns sanitation is in the charge of a Medical Officer of Health who may or may not be a government official. Certain dependencies still divide their medical staff into a health division and a medical division, but others have abolished this distinction.¹

In the East African territories the Conference of East African Governors² assists in maintaining touch between workers in medical as in other subjects. Conferences on the co-ordination of general medical research were held at Entebbe in November 1933 and at Nairobi in 1936, and two on tsetse flies and trypanosomiasis at Entebbe in 1933 and 1936. In West Africa inter-territorial conferences have not yet become a feature of medical activity, though a conference on yellow fever was held at Dakar in 1928, with representatives from the British West African colonies as well as from French territories. Local branches of the British Medical Association held conferences at Nairobi in 1932, at Dar-es-Salaam in 1934, and at Kampala in 1936.

Most territories have laboratories staffed by pathologists and other specialists, who are largely concerned with routine work but are sometimes able to undertake original research in addition. The most important of these centres are at Lagos, Accra, Free-town, Nairobi, Kampala, Dar-es-Salaam, and the Yellow Fever Research Institute at Entebbe in Uganda³ (until recently the Human Trypanosomiasis Institute).

The dissemination of information regarding work done in other territories, and new methods and discoveries, is a problem of importance to scientists working in African conditions. The Bureau of Hygiene and Tropical Medicine and also the *East* and *West African Medical Journals* assist in this direction, but it is felt in some quarters that local advisory bureaux on a small scale are also necessary. In Kenya an honorary Library Committee, under the auspices of the British Medical Association, has undertaken the study of literature and the circulation of information.⁴

¹ See below, p. 1196.

² See Chap. VI, p. 182.

³ *Annual Report of the Medical Department*, 1936, p. 8.

⁴ *East African Medical Journal*, vol. xi, no. 10, 1935.

(h) Northern Rhodesia

In Northern Rhodesia difficulties in extending medical services are accentuated by the large area of the territory and the low density of population, amounting only to 4·7 a square mile, and it is clear that the provision made in regard to the health conditions of natives is inadequate.¹ It is stated that over half the territory remains unprovided with medical facilities.² By comparison with other dependencies the proportion of the total revenue devoted to this work is small. Medical Officers have large areas to supervise, and the claims of non-native practice and lack of easy communications prevent frequent visits to rural districts and dispensaries; there seems also a lack of means for ascertaining the facts about the health conditions in the native reserves. The government maintains seven European hospitals, twelve native hospitals, and eighteen rural dispensaries. The dispensaries are staffed by Africans, many of whom are stated to be imperfectly trained. The staff includes ninety-three African orderlies and seven microscopists.

With the help of a grant of about £20,000 from the Colonial Development Fund, plans have been made for the erection of a hospital and training school at Lusaka, two other hospitals, and twenty-two dispensaries.³

In addition to the government service the Roan Antelope, the Mufulira, and the Rhokana Copper Mining Companies maintain fully staffed hospitals for European and native employees. Missions are also active and together support twenty-seven hospitals and dispensaries, five of which are controlled by qualified medical practitioners and the rest by trained nurses or by other partially trained staff. The government gave a subsidy of £3,050 in 1936 to medical-mission work.

The hospitals provide 132 beds for Europeans (figures for natives not available), and in 1936 1,691 European and 10,700 African in-patients were treated, and 52,151 African out-patients; the rural dispensaries admitted 1,534 Africans and treated 24,160 out-patients. Government expenditure in 1936 was £852,417 (total)

¹ *Medical Report on Health and Sanitary Conditions*, 1936, p. 1.

² *Report of the Commission on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, p. 290.

³ *Ibid.*, pp. 292-3.

ORGANIZATION IN BRITISH TERRITORIES IN AFRICA 1163
and £65,091 (medical). Staff provided for 1938 includes 20 European Medical Officers, 39 European nurses, and 3 sanitary inspectors.

(i) *Nyasaland*

Nyasaland, by contrast with Northern Rhodesia, has a relatively small area and denser population, concentrated especially in the southern part, and medical services can be more easily organized. The staff is relatively larger, and a number of Asiatic sub-assistant surgeons supplement the work of the Medical Officers. The African staff of over 200 includes 16 hospital assistants, 177 dispensers, 19 sanitary inspectors, 40 vaccinators, &c. There are 16 European Medical Officers, 2 sanitary inspectors, 11 nurses, and 9 sub-assistant surgeons. Eighteen medical posts designed to have a European Medical Officer in charge are at present filled by Asiatic sub-assistant surgeons or even by African hospital assistants, and in the northern areas in particular many rural districts are out of reach of dispensaries. There were 2 European hospitals, 15 native hospitals, and 93 rural dispensaries in 1936. There is also a number of mission hospitals and dispensaries; the Scottish missions have from early days been conspicuous in medical work. In 1936 it was stated that there were 26 African and 1 European mission hospitals; the qualified staff, which, however, varies from year to year, included 11 doctors and 22 nurses. The bed accommodation varies from under 10 to 129 in the various hospitals and dispensaries. A laboratory at Zomba is in charge of a government pathologist, but routine duties prevent much time being given to research. In 1931 a grant of £43,079 was made to the territory by the Colonial Development Fund for public health, most of which has been spent on hospital buildings. The Medical Department is represented on a Native Welfare Committee, established in 1935, to facilitate co-operation between the social services. As in other East African territories the Education Department includes the teaching of hygiene in its curriculum; the Jeanes School¹ has special courses for chiefs, which are said to have had some influence on hut-building and on the choice of suitable village sites.

¹ See Chap. XVIII, p. 1228.

The following information is available for 1936: in-patients—165 Europeans, 9,757 Africans and others: out-patients—1,685 Europeans and 435,489 Africans and others. In rural dispensaries 301,738 cases were treated. Total government expenditure was £617,573 and medical £48,181.

(j) *Tanganyika Territory*

In Tanganyika Territory the Medical Department is arranged in administrative, medical, health, and laboratory sections, with a special section for dealing with the medical side of sleeping-sickness work. The organization at Shinyanga, previously referred to,¹ is not a part of the health organization. It is occupied with research into the habit of the tsetse, and with experiments in methods of control; it is maintained largely by a grant from the Colonial Development Fund, which in 1938 contributed a grant of £207,974, to be spread over a period of seven years, for tsetse control work. There are also maintained, at the expense of the Colonial Development Fund, three research units which are devoted to trypanosomiasis research in a laboratory at Tinde, to malarial survey, and to tuberculosis research. The Asiatic staff of 55 assistant and sub-assistant surgeons and 24 compounders is an important part of the establishment; the African subordinate staff includes 109 dispensers, 40 sanitary inspectors, vaccinators, hospital orderlies, and nurses. In 1936 there were on the European staff 50 Medical Officers, 30 nurses, and 21 sanitary inspectors. There are 9 hospitals for Europeans. The native hospital system consists of 48 government general hospitals, 2 mental hospitals, 297 tribal and 37 Medical Department dispensaries.² The missionary societies maintain a number of hospitals for natives with, in 1936, a staff of about 18 qualified doctors. Their work is often of a high quality and includes maternity work and the training of African orderlies and nurses. The tribal dispensaries are maintained by the native authorities, and £18,565 was spent from native treasuries in 1936 on medical services, and 529,954 cases were treated.³ In 1936 government hospitals provided 73 beds for Europeans, 118 for Asiatics, and 2,012 for Africans; European in-patients were 1,609,

¹ See above, p. 1132.

² *Annual Medical and Sanitary Report*, 1936, pp. 19–20.

³ See below, p. 1189.

ORGANIZATION IN BRITISH TERRITORIES IN AFRICA 1165
and Asiatic and African 36,412; European out-patients were 3,108
and Asiatic and African 594,908. Total government expenditure
was £2,029,824, and Medical Department £185,737.

(k) *Kenya*

In Kenya the Medical Department, developed after 1905, is arranged in administrative, medical, sanitary, and laboratory divisions. There are proportionately more European Medical Officers, nurses, and health visitors, but fewer Asiatic qualified men than in Tanganyika Territory. The Medical Research Laboratory at Nairobi, which was completed in 1931, also provides some service for the neighbouring colonies. Besides carrying out research on the more usual problems it has made interesting investigations into the physiology of Africans, their brain structure, mental conditions, blood morphology, and chemistry.¹ Provision for Europeans is made by three principal hospitals at Nairobi, Mombasa, and Kisumu, and smaller hospitals in townships, as well as a number of private nursing homes which have grown with private medical practice. For Asiatics and Africans there are 6 hospitals in the towns, some 23 in native reserves, and 6 small hospitals in the northern parts of the colony, including Turkhana, the Northern Frontier Province, and Lamu. There are a number of mission hospitals in the territory, and in 1936 a grant of £3,700, made by the government, was apportioned between the Methodist Missionary Society, the Church of Scotland Mission, the Church Missionary Society, the Seventh-Day Adventists, and the Neukirchen Mission Society. The Medical Department has taken a large share in projects for the improvement of living conditions in the native reserves; through its agency efforts have been made to improve the type of native house and the village sanitation, and importance is attached to the provision of sanitary inspectors, who are general advisers on native betterment under the Medical Officers. The policy of the Department is to set up in each large native district a 'health centre'—an organization consisting of a hospital with a Medical Officer and European nursing sister, and a number of out-dispensaries; there is also posted to each district a European sanitary inspector, among whose duties is the

¹ See Chap. II, p. 37.

instruction of the natives in hygiene and in the building of houses.¹ A certain number of out-dispensaries, staffed by Africans, are established in the native reserves, seven of which are maintained by the local native councils.

In 1936 government hospital statistics were as follows: beds—European 73, Asiatic 52, African 1,928. European in-patients were 1,817, and Asiatic and African 46,632; European out-patients were 3,609, and Asiatic and African 408,788; out-dispensary first attendances were 640,261. The European staff included 54 Medical Officers, 50 nurses, 3 health visitors, and 12 sanitary inspectors; there were 26 Asiatic sub-assistant surgeons (2 being assistant surgeons); the African assistant staff of 1,204 included 33 hospital and 92 laboratory assistants, 30 health workers, and 648 dressers. The Medical Department's expenditure was £197,049, and total government expenditure £3,350,381.

(1) *Uganda*

In Uganda the Medical Department is subdivided into administrative, executive, and laboratory divisions. A distinctive feature of medical work in the protectorate is the employment of a number of qualified African assistants, whose presence has enabled the European Medical Officer to devote more time to his preventive duties, and to the general superintendence of the medical and health work of his district. The Asiatic staff has been reduced, owing to the increase in trained Africans, and now consists of 12 sub-assistant surgeons and several nurses. Among the African staff are 30 medical assistants, trained at the Mulago Medical School, holding appointments in the African Civil Service,² who have in some cases replaced Asiatic sub-assistant surgeons and are, where practicable, in charge of small districts. The medical laboratory carries out routine duties, and a medical entomologist attached to the entomological section of the Mulago agricultural laboratory deals with problems of entomology. Research has been carried out at the Human Trypanosomiasis Institute at Entebbe, which now houses the Rockefeller Foundation team investigating yellow fever in East Africa. There is a mental hospital at Mulago, four general hospitals for Europeans, nine for Asiatics, and twenty-three for Africans.

¹ *Medical Department Annual Report*, 1936, pp. 54 ff.

² See Chap. VI, p. 234.

A policy of establishing dispensaries in rural areas is actively pursued, and in 1936 these numbered ninety-three, and attendances of out-patients amounted to over three millions. The cost of erecting them is usually met from native administration treasuries; recurrent charges are borne by the native treasuries or by the central government, either wholly or in part, according to the ability of such native administrations to pay. In 1936 expenditure on medical and health services from native treasuries amounted to £19,283. Rural dispensaries are developed as village institutions at which the necessity of submitting to sanitary measures and general medical knowledge are taught. Health work in rural areas has effected improvement in safeguarding water supplies, drainage of swamps, sanitation of native dwellings, and the introduction of an improved type of house which it is within the financial capacity of the African to build. Associated with the dispensaries are itinerant medical orderlies who hold out-patient clinics at fixed places. Medical missions have been especially active in Uganda; the work of Sir Albert and Lady Cook, of the Church Missionary Society, is indeed outstanding; the hospital built by them at Mengo trains African nurses and midwives,¹ and the twenty-four maternity and child-welfare centres attached to the mission deal with some 150,000 cases annually. Similar training schools and maternity centres in Uganda are organized by the Franciscan Sisters.

Government hospital bed accommodation was: European 34, Asiatic 56, African 1,273. In-patients were: European 517, Asiatic 1,345, African 29,215; out-patients: European 3,076, Asiatic 7,566, African 368,151. The European staff included 45 Medical Officers, 35 nurses, and 17 sanitary inspectors. There were, in addition to the 30 trained African assistants, 34 health workers and a large and varying number of other employees. Departmental expenditure for 1938 was estimated at £190,121 and total government expenditure at about £2,179,659.

(m) *Nigeria, and the Cameroons under British Mandate*

The medical and health organization in Nigeria and the British Cameroons is divided into medical, health, laboratory, and sleeping-

¹ See below, p. 1190.

sickness services. It is noteworthy that the medical staff now includes 14 African Medical Officers, qualified in Europe and holding appointments similar to those of Europeans, and a number of medical assistants are now in training at Yaba.¹ Other subordinate African staff includes dispensers, nurses, midwives, sanitary inspectors, and vaccinators. The laboratory service is centred at the African Hospital, Lagos, and the Research Laboratories at Yaba, which include the former Rockefeller Yellow Fever Laboratory.² There are subsidiary centres at several of the principal hospitals in the Northern and Southern Provinces.

The hospital system includes twelve European hospitals. The African hospitals in 1936 numbered twenty-four in the Northern Provinces, of which thirteen are under the native administrations; and thirty-three in the Southern Provinces, of which six are wholly and three partly under the native administrations. Some of the hospitals maintained by the native administrations, for example that at Kano, are large and well equipped institutions. In addition there is an extensive system of native administration dispensaries, of which some 300 were established by 1936, 121 in the Northern and 179 in the Southern Provinces.

Many of the missions, particularly in the Southern Provinces, have important medical centres; in 1936 they controlled twenty-two hospitals for Africans, ninety-seven dispensaries, sixteen leper settlements, and 116 maternity and infant-welfare centres, and treated some 216,500 patients.

It has already been mentioned that Nigeria, in order to deal with its sleeping-sickness problem, is now undertaking a combined scheme of inspection and treatment by means of a territorial organization similar to those working in French and Belgian territories.³

The government hospitals provide 148 beds for Europeans and 3,503 for Asiatics and Africans. There were 1,116 European in-patients, and 60,098 others; out-patients were: 7,176 European and 650,209 Asiatic and African. The European staff includes 114 Medical Officers, 62 nurses, and 37 sanitary inspectors: the African staff has also 5 junior medical officers, 26 assistants, 11

¹ See Chap. VI, p. 235; also, below, p. 1184.

² See above, p. 1127.

³ See above, p. 1134.

health visitors, and a large subordinate personnel. Government expenditure on medical and health services amounted to £387,600 out of a total expenditure of £6,061,348.

(n) *The Gold Coast, and Togoland under British Mandate*

In the Gold Coast and British Togoland the Medical Department is centred at Accra and has medical, health, and laboratory branches. The European staff is relatively large considering the size and population of the territory. The medical branch includes eight African Medical Officers, qualified in Europe, and an African dentist on the senior staff. The laboratory branch at Accra is mainly engaged in routine duties in connexion with hospital work. There are six European hospitals, apart from the infectious diseases hospital at Accra. The Gold Coast hospital, erected at a cost of over £254,000, has a permanent staff of five Medical Officers. It is a training centre for nurses, dispensers, and other subordinates, and receives cases needing special diagnostic methods or treatment from other hospitals. There are thirty-two African general hospitals, each in charge of a Medical Officer, nine hospitals for contagious diseases, sixteen village dispensaries, and two field hospitals in the extreme north of the territory, dealing mainly with sleeping sickness. There are also child-welfare centres, three of which are financed by the Gold Coast Branch of the Red Cross. While many hospital buildings have been erected in the important towns, at considerable expense, dispensaries in rural areas are as yet few, and it appears that the initiative is left largely to the local native authorities, who, in the absence of a regular 'native treasury' system,¹ have no means of making the necessary provision for them. Although road communications in the Colony and Ashanti enable patients to reach hospitals with comparative ease, a further extension of rural dispensaries is necessary to reach the bulk of the population. Some of the missions maintain welfare centres and hospitals.

Government hospitals provide 68 beds for Europeans, 995 for Africans in the general hospitals and 121 in the contagious diseases hospitals; in 1936 there were 931 European and 26,150 African in-patients, and 2,095 European and 282,035 African out-patients. The European staff includes 54 Medical Officers, including

¹ See Chap. IX, p. 474.

3 pathologists, 1 alienist, and 2 specialists, 32 nurses, 21 sanitary inspectors, and 3 health visitors (1 government and 2 Red Cross Society); the African assistant staff of 512 includes 236 nurses, 113 sanitary inspectors, 105 dispensers, village overseers, and laboratory attendants; there are also 7 African health visitors. Government medical expenditure in 1936 was £312,413 (recurrent) out of a total government expenditure of £2,337,357 (recurrent).

(o) *Sierra Leone*

In Sierra Leone there are separate medical and health branches of the Medical Department. In addition to the European staff there are 7 qualified African doctors, including a senior Medical Officer, a pathologist, and a considerable subordinate staff of nurses, dispensers, &c. There is a central European hospital at Freetown. The Connaught Hospital for Africans at Freetown dealt with 2,549 in-patients and 18,193 out-patients in 1936, and there were in 1936 four other smaller African hospitals. Three mission hospitals in the Protectorate and one in the Colony are subsidized by government, and a dispensary system has eight centres in the Colony and fourteen in the Protectorate.

In 1936 government hospitals provided 14 beds for Europeans and 535 for Africans; there were 180 European and 5,270 African in-patients and 474 European and 110,524 African out-patients. The European staff included 15 Medical Officers, 7 nurses and 3 sanitary superintendents; the African subordinate staff of about 160 included dispensers, nurses, health visitors, and sanitary inspectors. Government (medical and sanitary) expenditure for 1936 was £66,910.

(p) *The Gambia*

The Medical Department and most of the staff are concentrated at the Victoria Hospital at Bathurst. The health conditions of the capital are far from satisfactory. A reclamation scheme to improve the level of a part of the town which is submerged in the rainy season has been postponed, and the existing conditions of bad drainage are aggravated by bad housing. It is held that the dangers of plague infection are great and will continue to be so until rat-proof buildings replace the present hovels and drainage

is improved. Malarial infection is prevalent; there are also important problems of sewage disposal in Bathurst and the riverine towns. A senior research worker has been sent to the colony with a scholarship from the Medical Research Council. The Protectorate area, containing the greater part of the population, has long been starved of medical care. A new hospital is, however, to replace an inadequate institution at Georgetown. A small bush hospital has been erected at Bwiam, where sleeping sickness is prevalent; it treated nearly 1,000 sufferers from sleeping sickness in 1936. A dispensary at Kaiaf, also opened in 1936, treated 3,000 cases of various diseases in a few months, and the immediate success of these institutions proves the urgent need for medical treatment in rural areas. A child-welfare centre has been started near Bathurst, and a leper camp, recently constructed by a progressive chief, had a sudden influx of sufferers from the French territories and elsewhere, attracted by free housing and food.

Throughout the territory in 1923 there were 10,381 out-patients (first attendance) and 676 in-patients; in 1936 these amounted to 45,223 and 1,893 respectively and included 2,000 cases of sleeping sickness, 4,046 cases of yaws, and about 500 cases of leprosy. There appears to have been an undue concentration of medical work in the capital and the colony surrounding it. In 1937 there were three government hospitals, the Victoria, Georgetown, and Bwiam, providing 9 beds for Europeans and 98 for Asiatics and Africans; in-patients numbered 49 Europeans, 25 Asiatics, and 1,619 Africans; out-patients, 115 Europeans, 61 Asiatics, and 31,576 Africans. The European staff included 6 Medical Officers, 4 nurses, and 2 sanitary inspectors; there were 2 African assistants and about 40 others. Government medical expenditure was £32,110 and total expenditure £343,323.

V. ORGANIZATION OF MEDICAL SERVICES IN FRENCH TERRITORIES

A full account of the public health services in the French colonies as they were ten years ago was published in English by the League of Nations Health Organisation,¹ and also in statements prepared

¹ S. Abbaticucci, 'Public Health Services in the French Colonies', *League of Nations Health Organisation*, 1926.

for the International Colonial Exhibition of 1931.¹ Medical policy has not changed materially since then. The following account affords some comparison with the organizations in British and Belgian colonies.

There is no central institute for research and training in France wholly comparable with the London School of Hygiene and Tropical Medicine,² but the Pasteur Institute in Paris serves similar functions as a centre to which government may refer for advice. The Institute has branches in the French dependencies at Dakar, Kindia, and Brazzaville, directed from Paris, but receiving a grant from the local governments; the institute at Dakar is one of considerable importance. An inspectorate³ of all the colonial health services has head-quarters at the *Ministère des Colonies* in Paris.

(a) *French West Africa*

The organization in French West Africa is typical of the French preference for centralized and clearly co-ordinated methods in administration. Each of the colonies in the federation has a *Chef du Service de Santé* directly responsible to the Governor; for this purpose the district of Dakar is regarded as a distinct colony. The *Chefs du Service de Santé* receive guidance in matters of policy from the Inspector-General of Health Services at Dakar,⁴ and address regular reports both to the Governor of the colony and to the Inspector-General at Dakar. In each colony the *Chef du Service de Santé* has a staff of European doctors of whom the majority are military and have undergone a course in tropical diseases at the *École d'Application* at Marseilles. In addition the trained African establishment includes 'auxiliary' doctors, midwives, and health visitors who have passed through the medical school at Dakar. These 'auxiliaries' are an important feature of the French system; the character of their training will be described elsewhere.⁵ The European staff in French West Africa includes 180 Medical Officers, 68 nurses and dispensers, and 30 health visitors; the African staff has 185 'auxiliary' doctors, 250 health visitors, and 1,733 subordinate personnel.

¹ *Le gouvernement général de l'A.O.F., Exposition coloniale internationale de 1931.*

² See above, p. 1159.

³ See Chap. VI, p. 189.

⁴ See Chap. VI, p. 239.

⁵ See below, p. 1185.

There has been and is still some difficulty in obtaining French civil doctors, and hence a number of foreigners have been engaged as assistants, and some military doctors are seconded to the civil branch. Each colony has its principal hospitals, of which those at Dakar, St. Louis, Bamako in the Sudan, and Abidjan in the Ivory Coast are regarded as first class. That at Dakar has 432 beds for Africans, principally surgical cases, and a very popular maternity centre for Africans which deals with some 800 deliveries a year. Dakar has also a unique feature in its medical centre, the *Poli-clinique*, run in conjunction with the medical school;¹ it is an out-patient centre for the African population, in which an average of more than a thousand consultations takes place every day. There are separate departments for infant welfare, maternity cases, and radiology, and every schoolchild in Dakar is examined by the staff twice a year. The hospital at Bamako, on the other hand, appears to be mainly for Europeans. Hospitals of the second category are at Conakry in Guinea, Porto Novo and Cotonou in Dahomey, while third-class hospitals, each with a surgeon and radiographer in addition to clinicians, are at Bobo-Dioulasso and Ouagadougou in the northern part of the Ivory Coast and at Niamey in the Niger Colony.

Staff not absorbed by these hospitals is distributed according to a plan which aims at providing each administrative *cercle* or district with at least one *centre médical* staffed by a European doctor assisted by African auxiliaries. These centres deal with urgent surgical cases and supervise subsidiary centres (*infirmiers*) each in charge of African 'auxiliary' doctors, who in their turn are responsible for dispensaries in charge of African *infirmiers* or nurses. In some parts of the Ivory Coast and Guinea there are, in each administrative *cercle*, up to nine medical posts with 'auxiliary' doctors, but more usually two or three. This system is almost complete in Dahomey and the lower regions of Senegal, and is being extended as native doctors and other staff are trained at Dakar, but there are large areas still without dispensaries. In principle the extension of work is dependent on the availability of European supervision, since the system does not contemplate leaving an African 'auxiliary' in independent charge. This policy

¹ See below, p. 1185.

may be contrasted with that followed in some British territories, such as Tanganyika and Nigeria, where only partially trained Africans are often left without European supervision for considerable periods. There is a further difference between French and British policies: the French hospitals are regarded largely as the headquarters of field stations, whence curative and preventive medicine is made available in rural areas, whereas those in British territories are intended mainly as centres for treatment. In the smaller French hospitals, patients are encouraged to live with their relatives, who provide them with food while they undergo treatment—a system which undoubtedly adds to the popularity of the hospital, as those missionary bodies who practise it have found. It has, however, been criticized in some quarters as lowering the standards of hygiene and orderliness aimed at in European hospital services. For sanitary work the French rely on the ordinary medical staff, except at Dakar and other large towns, where special police supervise the carrying out of anti-malarial work, and a separate sanitary service for the destruction of vermin is in operation.

Special organizations deal with certain diseases, particularly sleeping sickness.¹ These, known as *équipes de prospection et traitement*,² number at present ten in the northern part of the Ivory Coast, two on the western border of that colony, three in Dahomey, two in the Sudan, one in Senegal, and two in Guinea, and twelve others are in formation. Each *équipe* consists of a European doctor, one or two African auxiliary doctors, and a number of African *infirmiers*, some of whom are trained in microscopic work. The methods of the *équipe* are of some interest. The doctor in charge and the microscopists select a group of villages, examine the whole population, and note on a card, which is then handed to each patient, the diseases found; the African auxiliary doctor then establishes treatment centres, and patients suffering from sleeping sickness, and also other curable diseases, are treated until the disease is, as far as possible, eradicated. By this means it is proposed to clear up one area after another, and as each is vacated by the special *équipe* it is left for the ordinary system of *centres médicaux* and dispensaries to keep observation and to give any

¹ See above, p. 1133.

² See E. B. Worthington, *op. cit.*, chap. xv.

further treatment that may be required. The African personnel for this special sleeping-sickness work are trained at Ouagadougou on the Ivory Coast, where three Europeans, including a bacteriologist and an entomologist, are permanently resident.

The African branches of the Pasteur Institute are widely consulted by the colonial medical organization, and perform many routine functions such as the preparation of vaccines; the branch at Dakar, for example, provides yellow-fever vaccine¹ for all the territories. There is also a bacteriological laboratory at Bamako in the Sudan, with a staff consisting of a French doctor and five African *infirmiers*, which produces vaccines for rabies, smallpox, and tuberculosis. There are other similar laboratories for routine work at St. Louis and elsewhere under the control of the *Chefs du Service de Santé*. Medical reports are not published separately for each colony, but a general report, and accounts of scientific work by colonial doctors, appear each year in the *Annales de médecine et de pharmacie coloniale*, which is an official publication of the *Ministère des Colonies*. A central institute for leprosy has already been mentioned.² Serious cases are compulsorily segregated. In 1935 over 12,000 new cases were detected and treated, besides 13,000 old cases.

Although private organizations and missions do not play so important a part in French African medical work as they do in the Belgian Congo, their work has been extended considerably in recent years. Local branches of the *Croix Rouge Française* and of the *Berçeau Africain* are in direct contact with their headquarters in Paris, and are mostly concerned with infant welfare. The Catholic and Protestant missions are responsible for some dispensaries and leprosy hospitals in French West Africa. Recent information from French West Africa reports 11 government hospitals and 437 ambulances and dispensaries; beds available for patients are 788 (European) and 5,484 (African). In-patients were 4,731 Europeans and 42,785 Africans; out-patients were 19,859 Europeans and 3,113,819 Africans. Out of a total government expenditure of 615,000,000 francs, medical expenditure accounted for 38,000,000.

¹ The vaccine is made according to the Laigret method from the brains of white mice.

² See above, p. 1143.

(b) Cameroons under French Mandate

In the Cameroons under French Mandate the staff of the official *Service de Santé* included in 1936 45 European qualified doctors and some thirty European chemists, dispensers, and sanitary agents. The auxiliary African staff numbered 667. Good hospitals are established in each regional headquarters, with *centres médicaux*¹ in the district headquarters and dispensaries in charge of *infirmiers* in the subdivisions. There is one hospital for Europeans and four for Africans, three *centres médicaux* for Europeans and eighteen for Africans, and thirty-eight dispensaries, of which eleven are provided with beds. The total number of beds at these institutions is fifty-four for Europeans and 2,064 for natives. There are fifteen maternity centres and nineteen dispensaries for infant welfare, with a total together of 792 beds. Laboratory service is provided by the *Institut d'Hygiène* at Douala, and there are thirteen centres for contagious diseases, besides the leper colonies already mentioned.² Sleeping sickness, regarded as the most important disease in the territory, is dealt with by *équipes de prospection* with a special staff. Six *équipes* are permanently at work followed by twelve detachments for treatment. By a compulsory system of attendance and recording systems, a medical census has been made in much of the area. Furthermore, the movements of natives in all sleeping-sickness districts are controlled by a system of medical tickets. Medical missions are active and have a staff of 11 qualified doctors, a number of Europeans with medical diplomas, and a trained African staff of 174 *infirmiers*; 10 hospitals, two of which were under construction in 1936, and thirty-seven dispensaries with a total of 752 beds are maintained.

In 1936 hospital in-patients numbered 220 Europeans and 15,728 Africans; the dispensaries treated 9,601 in-patients and 134,316 out-patients, and the mobile units a total of 596,555. In 1935 the total government (ordinary) expenditure was 57,798,926 francs and that of the *Service de Santé* 8,978,269 francs.

(c) Togoland under French Mandate

In Togoland under French Mandate the medical staff included in 1936 13 Europeans, of whom 10 were qualified doctors, and

¹ See above, p. 1173.

² See above, p. 1143.

6 African auxiliary doctors trained at Dakar and 197 other African assistants. There are central European and native hospitals at Lomé, 5 *centres médicaux*, 21 dispensaries, and 5 maternity centres. Sleeping sickness was dealt with by one *équipe de prospection*, with 7 treatment detachments, and 15,000 new cases were detected in 1936. A special sanitary service has been established in Lomé to reduce the incidence of plague, rabies, malaria, and yellow fever. A laboratory has been attached to the Lomé hospital and is used for routine examinations only. Missions carry out a certain amount of medical work.

In 1936 there were 62 European and 4,255 native in-patients and 933 European and 544,515 native out-patients. Total government expenditure was 25,748,748 francs and that of the *services sanitaires* 3,863,897 francs.

(d) *French Equatorial Africa*

French Equatorial Africa has a similar medical organization to that in French West Africa, but on a smaller scale; there has been unusual difficulty here in maintaining the necessary cadre of Medical Officers. In 1936 the staff consisted of 80 doctors, 46 European nurses (*infirmiers*), chemists, midwives, and health workers, and some 650 African subordinate staff—nurses, dressers, and sanitary inspectors. There were in the same year 5 hospitals, 52 dispensaries, some of which were movable units, 46 health centres; 66,736 cases were treated in hospital, and some 2,750,000 consultations given. As in French West Africa, hospitals are regarded as the headquarters of outside work, but as yet there are no native auxiliary doctors and midwives, such as are trained at Dakar. *Équipes de prospection* for sleeping sickness function, though on a smaller scale than in French West Africa; field work of this kind and village treatment are difficult in view of the four months' rainy season. Sleeping-sickness villages are established by the *équipe* system for the treatment of serious cases, who are compulsorily segregated. There is a leper village at Fort Lamy. Medical missions are also active.¹ In 1936, 66,736 cases were admitted to

¹ See, for example, the works of A. Schweitzer: *On the Edge of the Primeval Forest*, 1922; *More from the Primeval Forest*, 1931.

hospital; 12,567 new cases of sleeping sickness were diagnosed in addition to 13,000 previous cases treated. Budgetary provision for the *Service de Santé* amounted to about 20,000,000 francs.¹

VI. ORGANIZATION OF MEDICAL SERVICES IN THE BELGIAN CONGO AND RUANDA-URUNDI

The *Institut de Médecine Tropicale Prince Léopold* at Antwerp collaborates with the state laboratories in the Congo, and the results of research are published for the most part in the *Bulletin de la Société Belge de Médecine Tropicale*. The State Medical Service of the Belgian Congo has its headquarters in Brussels at the *Ministère des Colonies*. There is a state laboratory at Léopoldville with a large research staff, and others at Coquilhatville, Stanleyville, and Élisabethville, each with one officer, discharging for the most part routine duties.

Although the government service is responsible for medical work in every district, there has been a greater development of unofficial organizations than in the British or French colonies. In a sense these are comparable to the preventive health services in Belgium which are largely in the hands of voluntary associations. They function in well-defined areas and are controlled by the state through legal agreements in the case of mining companies, and through conventions or in return for subsidies in the case of benevolent societies and missions.

The Belgians have concentrated to a marked degree on medical work in rural districts. The Congo is divided for administrative purposes into provinces and districts, and each district is subdivided into a number of territories. These are portioned out into the charge of the official organizations known as the *Service de l'Assistance Médicale aux Indigènes (Sami)* and the unofficial bodies known as the *Service Auxiliaire de l'Assistance Médicale aux Indigènes (Sadami)*. The *Sami* includes the state service, and a subsidiary organization specially endowed, the *Fondation Reine Élisabeth pour l'Assistance Médicale aux Indigènes (Foréami)*; while the *Sadami* includes the numerous medical missions and also two important organizations, the *Croix Rouge du Congo* and the *Fondation Médicale de l'Université de Louvain au Congo (Fomulac)*.

¹ *Annuaire de documentation coloniale comparée*, 1936, vol. ii, p. 218.

The *Foréami*, which started in 1930, has large financial resources and has accomplished a great deal of work. A capital sum of 150,000,000 francs was provided as a permanent endowment, 100,000,000 from the Congo Government, 50,000,000 from the Belgian Government, and an additional gift of 288,853 from Queen Elisabeth.¹ The annual expenditure has risen from 2,250,000 francs in 1931 to nearly 11,000,000 in 1934; some twenty-seven Belgian doctors and twenty sanitary agents, together with a large number of African assistants, are maintained permanently in the field. The government has given the *Foréami* complete charge of the medical work in a large zone, in which it has organized a more thorough medical service for Africans than in the rest of the colony. The private medical societies, especially the missions, assist and are paid subsidies. The policy is to concentrate on one area for a few years, to eradicate as far as possible preventable disease, build hospitals, dispensaries, doctors' houses, and roads, and then to hand the cleaned area over to the state service to maintain the work with a comparatively small staff. The *Foréami* then moves on to the next sector to continue the process. For the six years after the organization came into existence, the principal area of activity was in the Bas-Congo among the Bakongo tribe. The centre of attack has now been moved to the adjoining sector of Kwango, where the building of roads, houses, and dispensaries is well advanced. There is a secondary centre for campaigns against sleeping sickness in the Ruzizi-Tanganyika region where this disease is rife.²

The *Sadami* services are mainly in the hands of the *Missions Nationales*,³ mostly Roman Catholic, and receive government grants: they support eight doctors and a number of semi-qualified Europeans. Protestant missions, however, do considerable work and in 1934 they maintained 29 European doctors with a number of hospitals and dispensaries.

The *Croix Rouge* started in 1925 and is probably the first unofficial medical organization in Africa apart from missions. It aims at obtaining results in a limited area, and its main work has been concentrated in the Uélé district, where a staff of four

¹ *Foréami, Rapport Annuel, 1933*, p. 5.

² *Foréami, Rapports Annuels, 1931-3.*

³ Chap. XVIII, p. 1271.

doctors and eight sanitary agents is in charge of rural dispensaries, maternity work, and leper villages.¹ It has also established other centres organized by local committees; thus at Léopoldville, where the native town has a population of about 25,000 men and 10,000 women, venereal-disease clinics have been opened; at Coquilhatville a maternity centre has been started, and village dispensaries are being established in the neighbourhood of Élisabethville.

The *Fomulac*, like the *Cadulac*,² which is concerned with native agricultural improvement, originated from the colonial enthusiasm of the University of Louvain. Its objects and methods are similar to those of the *Croix Rouge*. Two important centres have been established, at Kisantu and Katana, and a smaller post at Yasa. Four doctors are maintained in Africa by the organization.

The mining and other companies, such as the *Union Minière du Haut-Katanga*, the *Société des Mines d'Or de Kilo-Moto*, the *Forminière* and the *Huilleries du Congo Belge*, maintain efficient medical services for their employees.³ In all some fifty doctors are supported in Africa by the companies. Concessions carry the condition that hospitals and schools have to be provided for the natives, but several of the companies have done far more in these directions than they were bound to do, and the influence of the companies' medical services has extended considerably beyond the immediate vicinity of their undertakings. Some account has already been given of the medical services maintained by the mines;⁴ it may be added that both Katanga and Kilomoto maintain a nutrition consultant; both companies avail themselves also of the services of mission medical centres, and in the region of the *Forminière* a child-welfare centre, the *Bergeau Kasai*, has been formed at Tshikapa. The *Huilleries du Congo Belge* support maternity hospitals and training schools for native midwives.

In 1936 the Government of the Belgian Congo maintained 25 European, 2 Asiatic, and 70 African hospitals, providing 317 beds for Europeans, 17 for Asiatics, and 6,420 for Africans: 2,913 European and 85,279 African in-patients were treated and 14,584 European and 836,322 African out-patients. The European

¹ See above, p. 1143.

³ See Chap. XI, p. 681.

² See Chap. XIII, p. 953.

⁴ Ibid., pp. 673-82.

staff included 174 doctors, 6 *médecins hygiénistes*, 16 *agents sanitaires*, and 243 nurses; the African staff included 1,920 assistants, nurses, &c., and 31 *gardes sanitaires*. The 1937 Budget provided 62,375,218 francs for the medical service out of a total of 665,487,207 francs.

In 1936 there were 4 hospitals in Ruanda-Urundi; there were 54 European and 4,720 African in-patients, with a further 1,679 admissions to other medical centres. A total of 995,894 Africans were treated by government and the subsidized mission medical services. Total government expenditure was 31,279,468 francs and that of the *Service d'Hygiène* 4,833,825 francs.

VII. ORGANIZATION OF MEDICAL SERVICES IN PORTUGUESE TERRITORIES

In Lisbon there is a School of Tropical Medicine forming a centre of research and training. In Moçambique a state medical service is directed by a bureau with head quarters at Lourenço Marques. In 1934 there were 13 hospitals and the staff included 75 doctors, 12 chemists, 110 European and 120 African assistants and nurses. The state service aims at providing a hospital with radiological and research departments in each district under a Medical Officer who will supervise dispensaries in sub-districts in charge of African assistants; but how far this policy has been carried out is not clear. A central laboratory is attached to the hospital at Lourenço Marques where investigations into sleeping sickness are carried out; there are hospitals also in 10 other urban centres and a mental institution for Africans at Marracuene. Medical work by missions, both Roman Catholic and Protestant, is stated to be important; the latter maintain 3 hospitals and 10 dispensaries. A Central Commission for Public Charity and Assistance, with head-quarters at the capital, has branches in the out-lying districts. It maintains the *Instituto João de Deus* at Lourenço Marques and the *Instituto Elias Garcia* at Moçambique for the care of children, and also undertakes maternity work and general welfare work.

In Angola there is said to have been an expansion of medical work after the First Congress of Tropical Medicine of West Africa was held at Loanda in 1923. In 1935 a state medical service provided 15 hospitals and employed 65 doctors and a number of

European assistants, and courses of training are held for African subordinate staff. Also in 1935 the Protestant missions had 9 hospitals and 89 dispensaries with 8 doctors and 21 European assistants. Medical work is also undertaken by the Roman Catholic missions, and in 1934 they had 6 hospitals and 42 dispensaries. There is little evidence that health work is being done in rural areas on a scale which may be compared with that of the French or Belgian Governments.

VIII. MEDICAL EDUCATION OF AFRICANS¹

The medical service, like other technical services in Africa, can be envisaged as a pyramid the base of which is formed by a large body of African subordinate staff, the apex by the fully qualified Medical Officers, and the central part by the African 'auxiliary' doctors or 'medical aids'. Apart from any other consideration, financial reasons make it impossible to contemplate that the extension of medical and health services should be attained by a proportionate increase in the number of fully qualified medical men. It has been shown² that in West Africa a number of African medical men, qualified in Europe, have been employed in superior service. But, viewed from the financial standpoint, their employment can only ensure the saving of that proportion of superior-service pay which is deemed to represent the extra emolument given to a European for serving overseas. Nor, on the other hand, can expansion be achieved by enlarging the purely subordinate staff, which has been described as the base of the triangle. Practical considerations fix in each service the ratio which must be observed between the supervising and the subordinate ranks, and in the case of the medical services it would clearly be dangerous to disturb this ratio. If experience elsewhere is any guide, expansion can best be achieved by enlargement of the 'intermediate' services³ which can, as their training progresses, take their own share in supervision.

There does not exist in Africa any institution designed to afford Africans an opportunity of gaining full medical qualifications in the sense in which that is understood in Great Britain or in countries

¹ See E. B. Worthington, *op. cit.*, chap. xv.

² See Chap. VI, p. 257.

³ See above, p. 1168.

with which the British General Medical Council has concluded agreements for the reciprocal recognition of qualifications. Something will be said elsewhere¹ of the difficulty encountered by African students in obtaining a medical degree at any of the universities in the Union. There are, in South Africa, a few African medical men in private practice; they have, however, obtained their qualifications in Great Britain. French policy excludes on principle the possibility that diploma-holders from a local institution, such as Dakar, should hold a charge of independent responsibility, and even senior members of the auxiliary medical service, who have successfully passed the equivalent of post-graduate courses, are only allowed to take up private practice if they obtain a special permit to do so. That the British territories do not at present contemplate making provision for Africans to take a full medical degree is largely due to the acknowledged lack of the necessary facilities for pre-vocational education. The success of a medical degree course depends as much on the existence of an adequately educated section of society from which to draw its recruits as it does on the quality of the vocational training given in the course itself.

The need for training an 'intermediate' class of medical auxiliaries was appreciated at an earlier date in French West Africa than in the British territories. The East African territories have in the past employed a number of Asiatic assistant and sub-assistant surgeons. A few of these had taken a medical degree at one of the Indian universities, but the majority had taken a diploma at a provincial medical school; the former degree was recognized, subject to some conditions, by the British General Medical Council; the diploma ranked roughly as equivalent to a 'licentiate'. West Africa did not avail itself of this supply, and it is still the practice for Europeans to perform a large amount of routine diagnosis and treatment. Africans are now being trained as medical assistants at the South African Native College in the Union, at Yaba in Nigeria, and at Mulago in Uganda. French West Africa has Dakar; the Belgians have lately opened a medical school at Léopoldville. It is proposed to give some details about each of these institutions.

In South Africa a committee appointed in 1928 to inquire into

¹ See Chap. XVIII, p. 1217.

the training of natives in medicine and public health recommended¹ the provision of facilities at the University of Witwatersrand, in a non-European branch of the existing school, in which Africans would receive the same training as Europeans. A pre-medical year was to be spent at the South African Native College, students to be admitted from outside the Union, and loans provided from native funds to assist them to take the full course. This scheme has since been modified. By the aid of a large grant from the Transvaal Chamber of Mines a start was made in 1935 with the training of 'medical aids' at the South African Native College² in a course lasting three years, preceded by a preparatory year's training in science, and followed by a year's practical hospital and public-health training at Durban. The courses are designed for the purpose of providing assistants for District Surgeons in the reserves and other native areas. As such they should supply a definite want. Some of these assistants should be available for service in 1940.

Both Yaba and Mulago would appear to contemplate that, at some future date, they will be equipped to train fully qualified African practitioners,³ though at present they have a more limited aim. The Yaba Medical School was founded in 1930 and a system of training based on that of Great Britain was instituted in 1934. After a five-year course successful candidates will be registered as medical assistants, and will be entitled to practise medicine, surgery, and midwifery in the government medical service. An assistant who has been registered for at least three years, and who has passed a further examination, can be granted a diploma of licentiate and be registered as a medical practitioner in Nigeria. The training staff consists of a Superintendent of the Medical School and a teacher of pharmacy, but a prominent part is also taken by the staff of the African hospital at Lagos and of the research laboratories at Yaba.

The institution at Mulago in Uganda is intended to make provision for the needs of East Africa generally. A school for the training of African assistants in medicine and surgery was started

¹ U.G. 35, 1928.

² See Chap. XVIII, p. 1218.

³ *Report of the Commission on Higher Education in East Africa*, Colonial 142, 1937, pp. 87, 95 ff.

at Mengo Hospital by the Church Missionary Society in 1913. After the War it was closed until 1921, when it was revived and continued under a Medical Officer appointed by the Education Department. The object of the school was to bring the higher medical education of Africans up to a standard approaching that of the Indian sub-assistant surgeons. The course was of four years' duration, but in 1927 it was extended to five years and in 1936 to six, including the two years of pre-vocational science at Makerere College. The instruction is given by officers of the Medical Department. The number of students in 1937 was thirty-one; of these twenty-five were natives of Uganda, one was from Kenya, three from Tanganyika, and two from Zanzibar. It is considered that in some ten years' time the number of students will reach about 100, and the school will produce not less than thirty qualified African medical students annually.¹ A joint East African Examining Board in Medicine conducts examinations in pre-vocational science and in more advanced subjects, culminating in a final examination for a medical diploma. The institution will form part of the Higher College which it is proposed to start at Makerere, and the general standard of teaching is being raised so as to secure recognition of the Higher College Diploma from the General Medical Council. It is held that some of the diplomates are capable, under supervision, of running small medical stations and hospitals. After qualification the assistants work for a year as house physicians or house surgeons before taking up their work in the government services. In Uganda a system of registration of medical assistants was started in 1931.

The *École de Médecine de l'Afrique Occidentale Française* at Dakar was opened in 1918.² It may be said to be the most successful and certainly the largest effort in Africa to provide a colonial medical and health service with adequate African assistance; since its foundation the school has provided over 400 medical assistants with an acknowledged standard of efficiency. The training is aimed solely at providing assistants for the state service. It is only in France that full medical degrees can be obtained, and,

¹ *Ibid.*, p. 95.

² F. Sorel, 'Les écoles de médecine de l'Afrique française,' *Bruxelles-Médicale*, vol. 17, no. 43, 1937, pp. 1526-35.

generally speaking, the *médecins auxiliaires* trained at Dakar are unable to make a private practice; provision has, however, been made for those of an exceptionally high standard to obtain permits to practise privately, but only after service for the state, and no such permits have yet been given. Prospective *médecins auxiliaires* spend a special course of two years' general education at the *École William Ponty* on the island of Gorée. Selected candidates then take a four years' training at the medical school; more than a hundred students follow the course at one time, and include some half-castes. They obtain their clinical training at the general hospital, the maternity institution, and the *Polyclinique* to which reference has already been made.¹ About twenty-five students pass the final examination each year and then follow a course of practical work in hospitals before they pass into the government service. Refresher courses are given at intervals, and a further examination is imposed after ten years' service.

The advanced training of Africans as medical assistants or auxiliary doctors has only of recent years been recognized as a necessity in the Belgian Congo. A government school for the training of medical assistants was opened at Léopoldville in 1936, and a similar school is to be opened at Kisantu under the direction of *Fomulac*.² The course is to last for six years, two of which will be spent in practical work in the laboratories and centres of the *Assistance Médicale aux Indigènes*.³ The standard of teaching and of previous education is to be equal to that of the Mulago and similar schools. By 1937 five pupils had completed their first year with success.

The education of the subordinate staff, such as male and female nurses, dressers, and hospital orderlies, does not necessarily demand a special institution since training facilities can be made available at hospitals; it is, however, an advantage to have a special school for some of the more skilled branches, such as dispensers. A visitor to African medical institutions will find a great variety of practice in the training of subordinates, as well as a somewhat bewildering variety of nomenclature; a 'dispenser' is in some places a ward

¹ See above, p. 1173.

² See above, p. 1178.

³ See Ordinance 38 / Ter. Hyg. of March 12, 1936, for conditions governing the school.

orderly, placed in charge of an outlying dispensary; in others he is a hospital dispenser, who has been trained for the purpose in a special school. There is also some variety in the educational standards accepted for entry into the subordinate services; in some quarters it is held that more suitable material is to be found in the product of the primary school than in those who have passed through higher classes. There is a very general agreement as to the efficiency attained by medical subordinates in certain classes of work, such as the routine use of the microscope, and the administration of injections. Generally speaking, however, the character of the existing medical subordinates necessarily reflects the fact that there is still, in most parts of Africa, a low standard of general education, and efficiency can only be maintained by the exercise of a close supervision.

In remarking on the facilities now existing for the training of subordinates, it must be remembered that a great deal of medical education has been, and is still being given by the missions. The training given varies from a four-months' medical course in connexion with a well-organized hospital to that given by individual mission doctors or nurses at small centres; but as future development in medical education depends to a great extent on an expansion of the state services, the following account aims at giving an outline of these, and necessarily omits reference to much other important work.

In the Union, training is mainly given by missions for subsequent employment in their own hospitals and dispensaries. The committee of 1928, referred to above, recommended that the state should give training to natives as health assistants and nurse-midwives. In the High Commission Territories training has been started with the aid of a grant of £10,000 made by the gold-mining industry in May 1934, but there is, at present, no scheme in any of the three territories for the organized training of Africans as medical assistants or health workers. In Bechuanaland a few Africans of both sexes are trained each year as nurse-aids and dispensers at Serowe and Lobatsi Hospitals; some of these proceed to outlying dispensaries, where the intention is that they should give simple medical treatment and instruction on hygiene in the neighbouring villages. European sanitary inspectors are to train

a few Africans in health work. In Swaziland the training of female nurses is carried out at the hospital at Bremersdorp, and the first eight probationers completed a year of training in 1936.

In Southern Rhodesia the training of native medical orderlies at schools attached to the Salisbury and Bulawayo Hospitals has been developed in recent years in connexion with the extension of the medical services to native rural areas. No provision is made for the training of 'medical aids'. Orderlies are posted to the medical units to take charge of sub-hospitals or dispensaries. Schemes for the training of native women have been prepared, including the establishment of a training school for midwives in connexion with the Bulawayo Hospital.

In Northern Rhodesia the training of Africans is admittedly inadequate, and the extension of medical and health services in the rural areas is impeded by lack of subordinate staff.¹ A number of African orderlies have been trained in the past at both government and mission hospitals, but the backwardness of general education has made it difficult to find suitable candidates for serious training. A government course started in 1936 produced fifteen orderlies who were trained for one year only in view of the urgent need for subordinate staff. Future courses are to be for two years. The estimates for 1938 provide for a training school which will take some time to produce results.

In Nyasaland the training of subordinate staff is also backward. The Church of Scotland Mission at Blantyre provides a course of training for midwives and for African hospital assistants, and the majority of assistants employed in the government service are obtained from this source. The government now intends to train male nurses, dresser-dispensers, and health assistants at the African hospital at Zomba, but the higher grade assistants will continue to be trained at Blantyre.

In Tanganyika the training of African dispensers began in 1926. Courses, divided equally between theoretical and practical work, are given at various medical centres, followed, in some cases, by a course lasting three years at Dar-es-Salaam. In 1936 sixteen students were in training at the end of the year. The training aims at meeting the need for a large number of assistants capable of

¹ *Report*, op. cit., Colonial 145, 1938, pp. 292-3.

diagnosing and treating ordinary minor ailments, and of recognizing serious cases which require to be sent to the larger hospitals for treatment, and who can also supervise the tribal dressers employed by the native authorities. Scholarships are provided to enable exceptionally promising pupils to enter Mulago. The training of English-speaking sanitary inspectors at Dar-es-Salaam for urban work began in 1921, and of others speaking the vernacular only in 1925. In 1935 a training centre for tribal dressers was opened in connexion with Mwanza Hospital. The course lasts eighteen months, and eighteen students have completed the first year's training. Schools on a smaller scale, where the course will last three years, have been built and equipped by the native administrations at Bukoba and Musoma, and ten pupils were in training by 1936; there appears to have been in this case a certain duplication of effort. Tribal dressers staff some 300 dispensaries maintained by the native authorities, and though the large number opened is striking evidence of the desire of the tribesmen for medical treatment, the demand could only be met by sending out men who had had no definite training or at the most a few months only. The institutions opened at Mwanza and other centres have for their object the improvement of this system in the Lake Province, but such centres are clearly needed also in other parts of the territory. The dispensers are explicitly instructed to attempt to treat only minor ailments; they are required to encourage cases beyond their powers to attend a dispensary or hospital.¹

In Kenya since 1930 much attention has been given to the training of subordinate African staff, and courses of training are provided for hospital assistants, male nurses, compounders, and welfare workers. The Medical Training Dépôt in connexion with the native hospital at Nairobi had 21 learners in training at the beginning of 1936, and 12 others finished their training. Up to 1936, 37 hospital assistants and 11 compounders had been trained, and are stated to have reached a high standard. The course of training for Africans in health work at the Jeanes School was discontinued in 1936, partly for financial reasons, but more especially as it was felt that better results might be obtained by practical training in the field under European sanitary inspectors. There

¹ *Annual Medical and Sanitary Report*, 1934, p. 10.

is no institution for the training of African women in nursing, owing to the lack of a sufficient number of girls with an adequate elementary education; it is hoped, however, that training facilities may shortly be provided.

In Uganda, junior nursing orderlies receive one year's training at Mulago, followed by a year under a European nursing sister either there or at one of the district hospitals, after which a senior course may be taken involving another twelve months' work. Girls are in training at Mulago Hospital and at the mission hospitals, and take the same course and examinations as the male nurses. Two mission schools train midwives; the course consists of theoretical and practical training for two years. A special course for training Africans as sanitary inspectors was begun at Mulago in 1936, and sanitary overseers, with lesser qualifications than the inspectors, are trained by selected European sanitary inspectors in the elements of rural sanitation. After completing the course the overseers are attached to the native authorities. A course for training African artisans in simple well-construction and the protection of water supplies was begun in 1935.

In Nigeria nurses, dispensers, and other subordinate African staff are trained at several of the African general hospitals. The course for nurses is three years; after a preliminary theoretical training for six months most of the instruction is given in the wards and out-patient departments. For midwives and infant welfare workers the length of training is two and a half years, including the same six months' preliminary course in general nursing as the nurses receive.¹ Dispensers are mostly trained at the School of Pharmacy at Lagos, and a three-year course is followed by practical training at hospitals. Laboratory attendants similarly have a three-year course with a fourth year where possible. The training of sanitary inspectors has been developed especially in Southern Nigeria, and a centre at Ibadan was completed in 1932, with assistance from the Colonial Development Fund. The course is two years in length, and up to 1936 some twenty-five Africans passed through the school.

In the Gold Coast midwives are trained at the Accra Maternity Hospital, and nurse-dispensers for the rural areas at the Gold

¹ *Training of Subordinate Staff of the Medical Department, 1930.*

Coast Hospital. Four of these nurse-dispensers complete their training each year. It is anticipated, however, that in the absence of trained medical assistants, for the training of whom the nearest centre is Yaba, an expansion of the qualified medical staff will be necessary to provide adequate supervision, if these dispensers are to form health centres in all the rural areas. It is also proposed to provide a high grade of African health visitor, who will be a trained nurse and midwife and will have undergone a comprehensive course of hygiene.¹ A school for sanitary inspectors was reopened in Accra in 1934; the training of village sanitary overseers was started in 1935 by health officers in Kumasi and Tamale.

In Sierra Leone the Connaught Hospital at Freetown trains nurses, midwives, and dispensers, some of whom practise privately, but the majority stay in the government service. Sanitary inspectors are trained in Freetown, and recently refresher courses have been inaugurated. Facilities for training midwives and health workers will be extended when the new maternity hospital at Freetown is completed: a maternity training centre and an infant welfare centre will be included in the hospital, towards which the Colonial Development Fund is contributing,² and it is hoped that the work will be completed in 1939.³

There are no schemes for the systematic training of African subordinate medical staff in the Cameroons or Togoland under British Mandate, or in Gambia; they depend on neighbouring colonies or on such training as may be given in local hospitals.

In French West Africa the *École de Médecine* at Dakar provides courses of three years in dispensing and midwifery, and two years in district nursing, during which students spend a large part of their time in practical work at the *Polyclinique* and in native hospitals.⁴ Special training in connexion with the *équipes de prospection et traitement* is given to Africans at Ouagadougou.

An *École des Aides de Santé* was started in 1932 at Ayo in the Cameroons under French Mandate.⁵

¹ *Report on the Medical Department*, 1936, p. 33.

² Colonial Development Advisory Committee, *Eighth Annual Report*, 1936-7, Cmd. 5537, 1937, p. 6.

³ *Annual Report of the Medical and Sanitary Department*, 1936, p. 42.

⁴ See above, p. 1172.

⁵ F. Sorel, *op. cit.*

In French Equatorial Africa the present large subordinate staff has been trained in the hospitals, dispensaries, and health centres. In future it is proposed to form a centre for medical studies in connexion with the hospital at Brazzaville, consisting of a school for the training of *médecins auxiliaires* and a maternity school,¹ and in 1935 the *École Edouard Renard* at Brazzaville was reorganized to provide the pre-vocational training for the students.

In the Belgian Congo the schools at Léopoldville and Kisantu² have trained a number of medical subordinates and, in addition, a number of institutions have for some years trained male nurses, health assistants, midwives, and assistant nurses (*aides-infirmiers*).

The principal hospitals serve as training grounds for other subordinate staff as in the British and French territories, and the missions and auxiliary services train their own subordinate staff. For example, the *Croix Rouge du Congo*, in its work in Uélé, specializes in the training of nurses and midwives, usually the daughters of chiefs, who are encouraged to marry members of the subordinate staff and settle in the rural areas. As is subsequently noted, the general use of the Belgian religious orders for nursing and other offices in medical institutions is a prominent feature of Congo policy. At Astrida, in Ruanda-Urundi, a school for training native auxiliaries was started in 1937 and fourteen pupils passed the first entrance examination.

It will have been seen that at one time the training of medical subordinates was left largely to the missions, or to the discretion of individual officers in charge of hospitals or laboratories. In a number of territories the training of medical assistance of this class is now being systematized, though in some, such as for instance the Rhodesias and French Equatorial Africa, the matter is given less attention. Even if, as suggested earlier in this chapter,³ the African of this class is at present seen at his best in purely routine work, there is a wide and very useful field for his employment; it is clear, moreover, that in some cases it is necessary to take more active steps to educate subordinates such, for instance, as those employed in the native administration dispensaries of Tanganyika,

¹ *Discours d'ouverture du Gouverneur Général de l'Afrique équatoriale française au Conseil d'Administration*, 1936.

² See above, p. 1180.

³ See above, p. 1187.

who have been given responsibilities which they have not been trained to discharge. The position is one which seems to require some further study by the administrations concerned. It is especially necessary to consider the possibility which each territory offers of giving training to women and girls, through the employment of village health nurses. There are already a certain number of such nurses employed in some territories; their work lies in giving instruction in ante-natal and child-welfare work, and in domestic dietary and cooking. In Africa the employment of women on work of a public nature is not subject to the same difficulties as in many parts of the East; women have their own position in society, which, in West Africa at all events, seems to give them considerable independence, and extends to the right of possessing property of their own. It is nowhere more true than in Africa, that if social environment is to be altered, it is primarily the women to whom the necessity of change must be brought home. But if women are to be more largely employed on work of this class, it is also essential that the education of African girls¹ should be such as to supply the necessary number of recruits.

A problem which has become apparent is that, as advanced medical text-books are designed for European students they are to some extent unsuitable for those who will work in African conditions; also African subordinate staff is often necessarily isolated from immediate contact with superior officers, and has frequently to assume serious responsibilities. Handbooks in simple language for consultation and study would therefore appear to be of great value.²

IX. HEALTH POLICIES IN AFRICA

(a) *The Social Aspects of Health*

It is clear that poor physical conditions, due to poverty and environment, play an important part in the story of disease and sickness in Africa. The gradual realization in other continents of the relationship between environment and health is reflected in the growth of a similar outlook in Africa. In Europe this new outlook has brought changes in two particular directions. In the first

¹ See *Report of the Commission on Higher Education in East Africa*, Colonial 142, 1937, p. 71.

² See Dr. W. K. Connell's *Surgical Handbook for Hospital Assistants in the Tropics*, 1938, which has this aim.

place, the state's liability for the care of the sick worker has been accepted; and it is well that acknowledgement of this principle in Europe has come at a time when medical policy in Africa is still fluid. In the second place, the responsibility of environmental conditions for many diseases has been recognized, so that the improvement of working and living conditions, and education in simple measures of hygiene, take a prominent place in the programme of health organizations. This change of outlook has, moreover, coincided with the very general recognition that measures which lead to an improvement in health and an increase in population are likely to have a direct influence on African economics. It is, indeed, not too much to say that the larger industrial concerns have in some areas anticipated recognition by the administrations of the need for extending public health measures. They have realized that, low paid as the African labourer may be, an ailing and inefficient employee is expensive and wasteful. The lead given by some of the larger industrial concerns¹ in investigating the basis of a health dietary, and in measures taken for the promotion of health conditions among employees and their dependents, has been of definite benefit in the formation of a state health policy for Africa.

In the earlier days of colonial development, medical authorities tend, often perhaps unconsciously, to divide themselves into two groups. The first, anxious for the credit of European systems of medicine, concentrates its attention on extension of its hospital work, the standards of which it can ensure by its own supervision. It has some suspicion of an expansion of medical facilities which would involve entrusting to partially trained or unqualified hands the application of European methods in medicine and surgery. The second group does not question the value of hospital work; it acknowledges, in particular, that it would hardly have been possible to convince the native of the benefits of European medicine, if it had not been possible to exhibit to him the achievements of European surgery. But it is impressed with the narrowness of the field which the hospital under strict European supervision can command; it believes that, even if many risks and perhaps failures have to be faced, much positive good can still be achieved by a

¹ See Chap. XI, pp. 673, 680.

wide extension of dispensaries under partially qualified assistants, especially if care is taken to see that the latter pass on to the major institutions any cases which are beyond their control; and it adds that, in any case, it is necessary to maintain an extensive organization for dealing directly with epidemic disease, both on the preventive and curative side. Such an establishment must inevitably contain a considerable proportion of partly qualified men. The difference of view is sometimes expressed as a conflict between the advocates of preventive and curative medicine. That expression, however, overstates the actual facts; it is not justifiable to represent medical opinion as divided into two camps on the subject; often the difference of views is, in practice, only one as to the best manner in which a medical administration can expend the narrow resources at its disposal.

It has been seen that the French are content to maintain a few first-class hospitals, and for the rest to rely on the 'medical centre' with its attached dispensaries, and on mobile detachments for dealing with the epidemic diseases. The expenditure on the building and general equipment of the less important medical institutions is relatively low; the food, as already remarked, is often supplied by the family of the patient. This is far from impairing the popularity of the institution with Africans; and, indeed, it must need a great deal of skill and personal sympathy on the part of the European staff to overcome the impression left on the African by the discipline and the isolation from friends which is the rule in many of the British hospitals. The French appear to lose, on the other hand, by the fact that many of their doctors, being on the military cadre, have little incentive to study African conditions, and that administrative policy limits the expansion of medical facilities by refusing to open dispensaries where they cannot be supervised by a French qualified medical man. The Belgian system relies largely on the application of intensive methods to 'clear up' affected areas. It is a system which devotes its efforts in the first instance to dealing with certain types of disease and in particular with sleeping sickness. It maintains at the same time the normal hospital system, in which it makes a general use, as it does in education, of the Belgian religious orders to superintend nursing and the like. The system has much that is attractive,

in particular, the completeness of the study made of the areas under 'intensive' treatment, but it will not be possible to judge of its efficacy until experience has shown whether the 'clearing up' of the affected areas has a lasting effect.

The British territories have hitherto normally relied on a system of hospitals with their outlying dispensaries, rather than on the more elastic method of the mobile medical detachment, though, of course, the latter has been utilized to deal with outbreaks of epidemic disease, and it has been seen that Nigeria now contemplates the use of a system resembling that of France and Belgium to deal with areas affected by sleeping sickness.¹ There has been incurred on some of the British hospitals² an expenditure which can perhaps be justified in some cases by the fact that the hospitals are meant to afford clinical material for medical teaching; but in others the money expended might perhaps have been devoted with greater advantage to providing more extended areas with medical facilities of a much simpler type. It would clearly be unjustifiable, in the absence of any comprehensive expert inquiry on the subject, to attempt any generalization as to the relative merits of the systems employed by different countries; but quite apart from any suggestion of comparison, it is difficult not to desire to see in some of the British territories more evidence of the spirit which shows itself in a direct attack on the health problems of the people. In Africa it is not enough to multiply facilities (however good in themselves) for the treatment of such individuals as apply for relief; disease of the type which causes most mischief in Africa is generally a mass infliction, and must be attacked in the mass.

The adjustment of the balance between the improvement of health conditions through social welfare schemes and the treatment of disease through the usual agencies of medical science presents a difficult problem, the solution of which will necessarily vary in different territories. Public health work has been so commonly regarded as a specialist interest, that it is not surprising to find this outlook reflected in the history of medical services in British colonies. When the need for sanitary services became apparent, an additional division of the Medical Department was created, and in several territories the divisions are still separate.

¹ See above, p. 1168.

² See above, p. 1169.

It is, however, increasingly recognized that the two are inseparable, and that it is the chief task of a medical department to secure a rising standard of physical fitness among the population at large.

At no period which we can now envisage is it likely that the progress made by preventive work will enable us to dispense with hospitals; all that can be claimed is that they should not now be allowed an undue share of the provision made for the health services.

(b) *The Co-ordination of Welfare Departments*

Emphasis on the social aspects of health implies, as a corollary, that improvement in general health can only be achieved by effective co-operation between the various state services which affect the environment of the people. Expressed in more concrete terms, this involves, for example, that the improvement of nutrition must be recognized as the concern of the Education and Agricultural and other Departments as well as that of the health services. The medical authorities can do little more than indicate what dietary deficiencies exist, and it is for other departments to devise how these deficiencies may be made good, or to induce the people to change their habits of eating. Emphasis on any one aspect of social welfare cannot produce permanent results unless proportionate attention is devoted to the others, and the policy of the Medical Department requires close co-ordination with that of the other government departments, and also the private agencies, such as missions or commercial companies, which are concerned with the development of the country. Certain areas have adopted, with good results, the institution of development committees consisting of the heads of various departments of the social services; an example of this is the Nyasaland Native Welfare Committee formed in 1935, consisting of representatives of the Administrative, Medical, Agricultural, Forestry, and Education Departments.¹

(c) *Health Education*

It has been seen that the French and Belgian administrations have recourse to the use of a measure of compulsion to enforce compliance with medical requirements in certain classes of cases.²

¹ See *Report of the Nyasaland Native Welfare Committee, 1936*.

² See above, pp. 1141, 1176, 1177.

On some occasions British administrations have found it necessary to take similar powers.¹ There is in Africa little of that opposition to the application of modern medical science which arises from attachment to a recognized system based on different principles, such, for instance, as is felt for the *Unani* system of medicine by many Moslem peoples in the East. On the whole such compulsion as has been applied seems to have aroused little feeling, and it is difficult to see how some of the graver diseases can be effectively controlled without its use. The most difficult problem of the health services does not, however, lie in enforcing anti-epidemic measures, but in persuading Africans to adopt the recognized principles of hygiene as part of their social habit. Not all those who practise native medicine in Africa can be dismissed as witch-doctors; many are much respected, and it is indeed possible that a study of the herbs used by some of them might add to the list of remedies, such as quinine, which the pharmacopoeia owes to primitive medicinal practices. It remains, however, the fact that the sanitary services must now undertake an education in health matters which will replace the advice given by native practitioners and also many of the prescriptions of African custom, as conveyed in initiation ceremonies or the like.

Considerable advantage has been taken in Africa, as elsewhere, of the opportunities which school education affords for teaching the principles of hygiene, whether as part of the school course, or by means of institutions such as the Junior Red Cross. Experience shows, however, that the educational process needs to be carried on through adult life. Many methods, old and new, have been and are being tried in Africa.

The value of the public-health nurse living among the people has already been mentioned.² Health displays are said to extend knowledge of health matters, and can be held in connexion with agricultural or other shows or form travelling units providing health talks in the vernacular. Posters, in connexion with these shows or at hospitals and dispensaries, and literature³ are also said to be of value, and in Tanganyika letters addressed by the

¹ See above, p. 1132.

² See above, p. 1193.

³ See *The Book of Civilization*, arranged by Dr. A. R. Paterson, Part I, 1936; Part II, 1938.

medical authorities to mothers about the feeding of infants with solids are said to have been effective.

The cinema and broadcasting have their possible uses, which are discussed elsewhere.¹ They may possibly make a greater appeal to an audience which has had some education than to more primitive people.

The British Social Hygiene Council, which receives an annual grant from the Colonial Development Fund, has a library of educational films which are lent for exhibition in parts of Africa, and by means of conferences enables social hygiene workers from different parts of the Empire to keep in touch with each other. It also assists the campaign against venereal diseases by publishing a series of handbooks on biological teaching.

(d) Control of Migratory Labour and Travellers

It is said that in a population free from interference from outside sources, a balance would arise between the general resistance of the people to parasitic disease and the pathogenicity of the parasites. The balance which may have existed among African tribes is, however, liable to be upset by the contacts following from improved transport and the movements of labourers. Diseases have been introduced to which the African was formerly a stranger and to which he had developed no resistance, and fresh strains of parasites cause attacks of diseases to which he was formerly immune; further, Africans now contract diseases common to temperate zones, and it is possible that the intensity of these is increased owing to lack of acquired immunity, the low sanitary standards, or low resistance resulting from malnutrition.

Regulations regarding diets and living conditions are imposed with some measure of success on employees living in large compounds, but health control of casual labour presents a more difficult problem, especially where the demand for labour is seasonal. Africans travelling to places for work are often under-nourished, and readily fall victims to infection, and it is believed that cerebro-spinal meningitis and influenza, in particular, are spread by migrating labour, while travellers from sleeping sickness areas are liable to infect tsetse-fly in areas where the disease has not hitherto

¹ See Chap. XVIII, pp. 1297-1305.

been found. Similarly, new strains of malaria parasites may be introduced into endemic areas where the inhabitants are immune to the local strain.

Again, the returning worker may introduce to his home disease such as tuberculosis. Mechanical transport is easy to control, but foot transport presents greater difficulty. Successful control depends on the immediate notification of disease outbreaks from territory to territory, combined, where possible, with a system of medical passports recognized on both sides of the boundary. At present medical passports issued in one territory are often not recognized in neighbouring territories, and there are frontiers where no international control exists. Medical passports, again, are frequently impracticable in African conditions, where boundaries are extensive and medical staff insufficient to ensure proper control; hence it seems that the system must for some time yet be confined to limited areas. Medical passports are in force on the border between Uganda and Tanganyika Territory, west of Lake Victoria, to prevent the northward spread of the *rhodesiense* type of sleeping sickness, and the system is said to work satisfactorily, but mainly owing to the fact that the Kagera river forming the frontier limits the movements of people to four ferry crossings. On the other hand, while the Congo Government does not permit immigration from Uganda without a certificate that the immigrant is free from sleeping sickness, people on both sides of the border cross the river frequently and control clearly cannot be made effective in the absence of a large staff of inspectors.¹

(e) *The Problem of Payment for Treatment*

The problem of securing the widest possible use of the health services is closely connected with the question of payment for treatment, and the encouragement of private practice among Africans will also depend to a great extent on the policy adopted.

It has been seen that the present policy in the French colonies is to educate only that number of 'auxiliary' medical men which is needed for the service of the state. British policy, as is shown in Nigeria, contemplates educating medical men for private practice,

¹ *Report to the League of Nations on Tanganyika Territory*, 1937, p. 94.

and the South African training of 'aids' has the same object in view. A state hospital system, however widely extended, fails in one respect, namely, that it does not provide consultants able to visit patients in their own homes; and experience elsewhere shows that a demand inevitably arises either for private practitioners, or for the grant of liberty to hospital or dispensary doctors to take fees as private consultants. If this be granted, there inevitably arises either in fact, or in the impression conveyed to the public mind, a conflict between the duties for which the state and the patient are respectively paying. Both for this reason, and also on more general grounds, it seems preferable to encourage the growth of an independent medical profession.

The right of private practice among doctors who are members of a state service presents many difficulties. Theoretically it appears unsuitable for members of the British Colonial Medical Service, for example, paid for full-time government duty, to devote even a small proportion of their time to private work, but it is often difficult to maintain this attitude when no other medical aid is available. The present policy is to reduce, and possibly remove, this right, as private practitioners increase in number.

In the case of African patients, the policy regarding payment, in return for medical services provided by government or missions, varies in different territories. In the French colonies no payment is asked in return for medical attention save in exceptional cases where patients can obviously afford it. It is, however, usual in the smaller French hospitals for food to be provided by the patient's relatives and not by the government, so the costs of hospital upkeep are not heavy in respect of these items. In Togo under French Mandate payment is, however, required and a scale has been laid down of 1 franc for a consultation, and operation fees of 5-20 frs.; in-patients pay 1.50-3 frs.¹ In the Belgian Congo infectious diseases, including sleeping sickness and all epidemic and endemic diseases, are treated free. In the case of other diseases and of accidents and most surgical cases, some payment is expected from patients who can afford it, to cover the cost of at least part of the materials used, but no private fee may be

¹ *Arrêté* of January 19, 1923.

paid by natives to a doctor in the state services or under organizations such as *Foréami* or the *Croix Rouge*. Wherever possible the relatives of hospital patients are expected to contribute food for their support. In the British colonies it is usual for natives to receive free attention, but in many cases those who can afford to do so are required, both by government and mission institutions, to make small payments for treatment or medicines. These payments are required in Uganda, for example, except in cases of notifiable infectious diseases or of indigent persons and prospective mothers; revenue from this source comes particularly from patients having salvarsan injections. When possible, patients at hospitals or dispensaries in Uganda pay a sum not exceeding two shillings a week, but patients in private wards pay as much as one shilling a day. In Basutoland the African out-patients departments charge one shilling for each attendance, but in-patients receive free treatment.

In support of the view that treatment should be gratuitous it is said that in many parts of Africa medical attention is one of the few obvious returns which the African sees for payment of tax. Furthermore, it is held that free treatment would favour the declaration of diseases which might otherwise be hidden. On the other hand, it is held that Africans are more likely to appreciate medical aid and come for treatment with greater readiness if the service is not taken entirely for granted; Africans, like some Europeans, are said to appreciate benefits received in proportion to the amount they pay; thus an expensive injection is thought more effective than one costing less. It has been suggested that difficulties might be avoided by means of a simple co-operative system in rural areas, whereby small fees were charged on a regular basis and responsibility for payment rested with the local native authority or the headman, a certain proportion of the poll tax being considered as an insurance contribution on the lines of health insurance in certain European countries. It would be of interest were an experiment made on these lines; the suggestion is open, however, to the objection that the system of collection partakes so much of the nature of a tax as to lose any voluntary aspect. It would be liable to be viewed merely as an addition to the ordinary poll tax.

(f) Organization of Medical Research and Health Statistics

There is at times a tendency to apply the term 'research' to laboratory work of a more or less routine nature. Work of this class is of special importance in Africa, since tropical disease is frequently dependent on laboratory tests for its diagnosis; but it is more convenient to confine the use of the term 'research' to those activities which involve a definite element of new inquiry. In some instances investigation is undertaken by officers who are detached from routine work for this purpose; in others, and in particular in some of the smaller administrations, it is carried out by laboratory officers in such time as they can spare from their routine work. An indication has been given in the preceding sections of the institutions already in existence in Africa where investigation is being carried out. While in the French territories some degree of co-ordination is maintained through the Pasteur Institute, each laboratory in British territories is, in effect, an independent unit. Here the problem which arises is not merely that of the possible overlapping of work, though such overlapping undoubtedly occurs, but of finding a system by which, instead of the subject of inquiry being left largely to individual discretion, authority can be exercised to direct efforts towards the matters in which investigation is generally felt to be most necessary. The question will form the subject of a later chapter in this Survey;¹ it is sufficient to note here the opinions expressed at various times when this matter has come under discussion.

In East Africa the need for greater co-ordination has been felt, and an attempt to secure it has been made, by the holding of Research Conferences at Entebbe in 1933 and at Entebbe and Nairobi in 1936, while even earlier arrangements had been made to centralize the production of calf-lymph and stock vaccines required by Kenya and Uganda. The Research Conferences, which were intended to co-ordinate research and to prevent simultaneous investigation of problems on identical lines, have shown the difficulties inherent in organizing research under present conditions when responsibility is not centralized. For this reason the Standing Medical Research Committee for East Africa, which was

¹ See Chap. XXIV.

set up on the recommendation of the Research Conference in Nairobi in 1936, has advised that a medical research fund contributed to by all the East African governments and controlled by trustees should be formed, and that a Director of Medical Research for East Africa should be appointed to organize research in those territories. The scheme should be followed logically, if successful, by a similar organization in West Africa. It has been suggested that it may eventually be found desirable to centralize all colonial medical research services in association with the London School of Hygiene and Tropical Medicine. This would then allow of members of the staff of that School being seconded for service in territories abroad with gain not only to themselves, but also to the territories they visit and to the students whom they return to teach.

Medical research in Africa is concerned with many problems of the greatest importance. Some of these can be investigated in Europe as well as in Africa, others can only be investigated in the countries where they occur. With limited finance and equipment, it would appear reasonable that research in Africa should as far as possible confine itself to the second of these groups, leaving the first group to be dealt with by the large laboratories at home. It seems desirable also that research in Africa should devote itself primarily to problems of immediate practical importance, and to the task of adapting discoveries in Europe to African conditions.¹

There are final points of considerable importance, to which some reference has already been made in the chapter dealing with population records. No administrator can adequately determine the value of his health organization unless he has reliable vital statistics by which to measure it. It is obvious that the figures available in Africa are not only inadequate but often misleading.² Data collected from hospital returns might be expected to be accurate, but careful inquiry into the method of compiling them is necessary, and still more so into the qualifications of the person making diagnoses. Thus in certain colonies the return of cases of disease given in the Annual Reports includes a high percentage (50-70 per cent.) diagnosed by medical orderlies in charge of dispensaries with inadequate medical knowledge. Other colonies

¹ See also Chap. XXIV.

² See Chap. IV, p. 127.

return dispensary figures separately, but it may be accepted that even in district hospitals not every diagnosis is made by a qualified doctor, and substantial inaccuracies occur. So useless have these annual returns seemed to those whose duty it is to make them, that a recent conference of Directors of Medical Services in East Africa advised their replacement by a simple table giving returns according to the main groups of the International List of Causes of Death, and only specifying certain diseases which have a peculiar importance from the epidemic point of view. Further consideration of possible lines of improvement is clearly needed.

It is also clear from the statistics given in connexion with the organization of health services that large numbers of the African people, if not the majority, are still beyond the reach of medical and health services in the ordinary sense.¹ It is safe to conclude that in many districts such services consist of the limited facilities of a mission dispensary or a small supply of medicines and 'first-aid' material at a government station, possibly dispensed by a half-trained African orderly. Village sanitation does not exist in many areas—the sole sanitary measures are those brought about by the District Officer, who may insist on villages being kept clean, or advise native authorities to make rules to this effect and punish offenders. Most ordinances prescribing the powers and duties of native authorities allow for rules requiring the reporting of deaths, and it is usual for deaths from unknown or suspicious causes to be reported to the District Officer, who by this means may detect the presence of an unusual disease or an epidemic. The District Officer is, indeed, the channel through which the presence of such disease becomes known to the medical authorities, and in few rural areas does there appear to be any system of detection of disease by qualified persons that can be said to be effective. Opinions with regard to the incidence of the more typical African diseases may vary, but it is clear that in many rural areas the mortality from malaria is high and that sources of malarial infection exist in most villages; that intermittent fevers are prevalent; that helminthic diseases are almost universal, the filthy state of the villages being conducive to their spread; and that few village

¹ A comparison of these statistics with the Population Tables in Chap. IV, p. 108, might usefully be made.

children are free from sores, and many adults are under-nourished and have little stamina. An examination of a typical Central African village would show that the sick, especially old persons and children, are neglected or unwisely treated, the elements of hygiene are lacking, the wearing of unhygienic and dirty clothing is usual, food is prepared in dirty vessels, flies swarm on garbage thrown near the village, and huts are often unswept and infested with parasites. The conditions of urban compounds are often criticized, but they may be compared favourably with those in rural areas. Little can be done to improve such conditions until the Africans themselves are conscious of a need for betterment, or at least until the native authorities themselves are aware of their responsibilities, and the health services have sufficient staff at their disposal to enforce sanitary measures.

CHAPTER XVIII

EDUCATION

I. THE GENERAL NATURE OF THE PROBLEM

IN a discussion of education in Africa it is inevitable that attention should be mainly directed to native education. That of Europeans has its own problems, which will claim some notice, but they can for the most part be solved in accordance with precedents which exist elsewhere. The problem of native education is peculiar because the circumstances of an undeveloped race are fundamentally different from those of a homogeneous and relatively static modern community. In such a community, the chief function of education is to maintain the continuity of culture by transmitting to successive generations not only accumulated knowledge but acquired standards of value and conduct; in Africa education is, and is intended to be, an instrument of change.

The African has his own methods of education in the form of character training and instruction in crafts, or, in the case of girls, in the duties of domestic life. Initiation ceremonies or 'regimental training' are usually the culminating point, and the system is directed to fitting the youth to take his place in the traditional life of his group: 'social obligations form the core of all teaching given by tribal elders.'¹ Education, as we now see it, has a new direction. The environment of the African is being rapidly modified by influences to which he has hitherto been a stranger, and his school life must therefore be designed not only to equip him to deal with his existing environment, but to fit him for the new conditions which he will have to face and to help him to take his own part in shaping those conditions. The method will be new, for it must be institutional, and cannot follow the traditional form of tribal instruction. Accordingly, the African child will be introduced to a world of thought, of achievement, and of conduct outside the experience of his parents; this access to new ideas is bound to make a break in his life, however much the educationist may wish to respect native tradition. What is to be the content of the instruc-

¹ W. D. Hamblly, *Origins of Education among Primitive People*, 1926, p. 412.

tion offered? How far and how fast can the process go? How is it to be related to the other influences which are transforming African societies? In so far as these influences are the product of conscious purpose, how far can they be made to form part of a unified scheme of development based on co-operation between the various services of government? What is to be the life ahead of the educated African? What are the relations between the teaching given to him and the views of the European community on his proper place in the social system?¹

Among the many problems of Africa there is none that has attracted more discussion, and indeed more controversy, than that of the type of education which should be given to the African. Much that has been written on the subject makes a valuable contribution to the body of informed thought of which every administration must take account in deciding policy; but it is also true that much that has been written, though admirable in its analysis of social factors and statement of principles, has failed to give that concrete guidance which the executive authority might have welcomed as to the manner in which the philosophy of education should be expressed in practice. Administrations have to translate abstract principles into the details of school courses, and the application of those principles is conditioned by financial resources, and by the quality of the teaching staff which can be made available.

Conceptions as to what is best in education are apt, moreover, to be coloured by political objectives; indeed, as will subsequently be seen, what at times has been put forward by administrations as a policy of education has in truth been only the expression of a political determination, or an effort to implement the view held of the place which the African should occupy in the social economy. Again, just as the policy of education is influenced by political considerations, so also is its practical application conditioned by financial limitations or by historical accidents which have affected the type of agency employed. It was asserted some years ago that nine-tenths of the education in Africa was in the hands of missionary bodies, and, whatever the accuracy of the figure,² it is

¹ For a recent discussion of these questions, see *Report of the Commission on Higher Education in East Africa*, Colonial 142, 1937, Introduction.

² As an example, Tanganyika calculates (1937) that of its one and a quarter million children of school-going age, roughly one million attend no school; 9,574 are on the rolls

clear that, in some territories at least, the administration has not in practice a full control of the application of the principles on which its educational policy is based. It will be seen that the French system is characterized by precision of objective and unity of method; but this is lacking in the British system, with its wide latitude in local practice, and, in addition, its large proportion of 'unaided' education over which the state assumes, in practice, little or no direction.

It would, therefore, seem advisable to give first some account of the course which education is taking in different territories, and of the policies followed. It will not be possible to give the facts in full detail, but an effort will be made to present sufficient data to explain the conditions which now determine educational policy in Africa. Tables giving such statistical material as is available will be found at the end of this chapter.¹

II. THE UNION OF SOUTH AFRICA

(a) *European Education*

The organization of the educational system of the Union owes its character to section 85 of the South Africa Act, which laid down that the responsibility for all but higher education was to rest with the provincial legislatures. Matriculation was taken as the dividing line, and this had the unfortunate result of preventing the retention of older boys in the secondary schools. The position has been further defined in the Financial Relations Act of 1913 and its amending Acts, under which provincial Education Departments receive subsidies from central funds, now calculated in the case of European education in proportion to the numbers of pupils in average attendance in each province. The details of this system have more than once been modified as the result of special inquiries, the most recent being that by the Provincial Finances Commission, 1934.² Industrial and vocational education, including trade and agricultural schools, have since 1924 ranked as higher education under Union control, though it is difficult to understand how their inclusion in the field of post-matriculation of government or native administration schools; 21,576 are on those of assisted mission schools; and 190,000 are said to attend unregistered mission schools.

¹ See Tables X and XI.

² *Report*, U.G. 46, 1934.

education can be justified. The principle of the subvention, which involves the separation of financial responsibility from administrative control, still remains a source of difficulty.

The Union Act leaves much room for overlapping in the administration of education, and the divorce of technical and industrial schools from other branches of secondary education is unusual. Nor have the local bodies yet received any effective share in the management of schools or the raising of finance. The Cape Education Ordinance, 1921, provides for local school boards, and there is a similar provision in the Transvaal and the Orange Free State, but not in Natal. Though the Cape school boards raised money under the old Cape Colony, their functions now, like those of the Transvaal and Orange Free State boards, are chiefly advisory.¹

Education is mainly provided out of public funds, though grants are made to private schools. It is free and compulsory up to the age of 16 in the Cape and the Orange Free State, up to 15 in Natal and the Transvaal. Secondary education is free in the Transvaal and partly in Natal, but not in the other provinces. Commercial and technical schools are Union institutions and fee paying.

(b) *The University Institutions*

There are in the Union four independent universities, and five university colleges which together form a fifth, the University of South Africa. They are largely dependent on the state for their finances. These institutions are impressive both in the scale of their buildings and extent of their resources, and it would be an interesting study, though one not possible to pursue here, to estimate the influence which they now exert on the life which South Africa is building up for itself. As in many of the more modern universities in Great Britain, a relatively high proportion of teaching is devoted to professional and vocational courses (including in the latter the course for the teaching diploma) rather than to general arts courses; this would appear to reflect a situation in which the demand for graduates with specialized training is greater than that for those with a general education. The excess of professional students over the numbers required in the Union itself is having its effect in the extension of the Union influence in other

¹ E. H. Brookes and others, *Coming of Age*, 1930, p. 416.

territories in which they find employment, such as Northern and Southern Rhodesia. That the influence of the Union university institutions has not been more marked in a direction in which many had hoped to see it develop—namely, the promotion of closer relations between the two white races in the Union—is due to the strength of the tradition of difference which exists among the population at large; but the association between students of the two races within those universities in which they meet on common ground is bound to have an increasing influence.

There is another direction in which it is important to mark their position. More than one observer has found that the universities have taken no inconsiderable part in producing the change which has been seen of recent years in the attitude of the Union towards native problems.¹ If there has not been a noticeable growth of sympathy towards native aspirations, there has been a keener interest in native life and a closer and more dispassionate study of native affairs. The development of systematic research into Bantu questions is significant. The University of Capetown, a pioneer in many fields, founded a School of African Life and Languages in 1918; a Chair of Bantu Languages was added in 1934. Stellenbosch has a Department of Bantu Studies with three teachers. Pretoria has lectures in anthropology and native administration, and the Witwatersrand has a well-staffed department including teachers of social anthropology, native law and administration, and languages.² In a number of university institutions there is a 'Bantu Studies Circle' founded under the influence of the National Union of South African Students; native questions are now increasingly discussed in students' debates.³ It is significant that this movement has continued in spite of the fact that government has ceased to make any contribution to the universities for Bantu studies, nor does it give students who have taken the course any preference in appointment to its administrative services. There is legally no colour bar in any South African university, and a certain number of non-European students have entered Capetown and Witwatersrand; but the difficulty which is to be encountered

¹ See M. Perham and L. Curtis, *The Protectorates of South Africa*, 1935, p. 75.

² See Chap. II, p. 53.

³ E. H. Brookes, *The Colour Problems of South Africa*, 1934, chap. vi.

by a Bantu native in gaining entrance is illustrated by the opposition which was at one time expressed to the appointment of a Zulu as language assistant in the Department of Bantu Studies at Witwatersrand.

(c) *The Two Official Languages*

European education in the Union is complicated by the recognition of two official languages, English and Afrikaans. In state schools the legislation of all the provinces, except Natal, lays down that primary instruction shall be given through the medium of the 'home language'; in disputed cases the decision of the school inspector is final.

After Standard IV parents may request that either or both languages be used as the medium of instruction. The second language is to be taught as a subject to all children unless their parents expressly object. The Natal law allows parents to choose the language of instruction of their children in all forms or standards, and provides that the second language may be taught as a subject if the parents request.¹ In all the provinces except Natal the majority of primary schools use Afrikaans as the medium of instruction; in Natal the Afrikaans-speaking pupils are a small minority. In the Union as a whole, however, the Afrikaans-speaking percentage of primary pupils was 57·8 in 1934. In 1934, of the secondary school pupils 18·7 per cent. were attending schools teaching in both languages, 47·1 per cent. schools with English as the medium, and 34·2 per cent. schools with Afrikaans. In the Orange Free State the greatest proportion of secondary pupils attend bilingual schools, elsewhere the majority are at English schools. In the case of higher education, the language of instruction has not been laid down by law, but the movement for the recognition of Afrikaans has had its effect in the development of the Universities of Stellenbosch and Pretoria as institutions which aim at making provision for the Afrikaans-speaking population. The incorporation of Pretoria (formerly the Transvaal University College) as a university in 1930 was the occasion for the assertion of its predominantly Dutch character, amid some protest from

¹ Ordinances 5 of 1921 (Cape), 13 of 1916 (Natal), 15 of 1930 (Orange Free State), 5 of 1911 (Transvaal).

those who had hoped that higher education might be a means of providing a meeting-ground between sections of the white population. The small University College of Potchefstroom, founded in 1866 by one of the Dutch Reformed Churches, was Dutch-speaking from its inception and is now Afrikaans-speaking.

(d) *The Finance and Control of Native Education*

Native education is under provincial control, but has been left largely in the hands of missions, subsidized by grants-in-aid. The allocation of funds for this purpose in 1855 was a direct result of the Constitution Ordinance granting representative government to the Cape.¹ The Royal Charter of Natal followed in 1856 by prescribing that an annual grant should be given for 'Native Purposes',² a portion of which was used for education. The state subsidy to schools for coloured and Indian children³ is based on the average attendance; native education is financed on a different principle, which has not failed to attract criticism as typical of the Union policy of racial differentiation. In effect, it places the liability for all expansion of educational services on the native population itself. This principle was first expressed in the Financial Relations Fourth Extension Act (5 of 1922), introduced soon after the Transvaal had passed an ordinance imposing a special tax on its native population. The provinces were debarred by the Act from imposing direct taxation on natives, and were required to expend on native education a sum not less than that which was actually being expended by them at the date of the passing of the Act. This was now provided from Union funds and was assessed at a total of £340,000; it was further provided that the improvement of native education might be subsidized by grants out of the revenues derived from native taxation, the basis of the subsidy being later defined in the Native Taxation and Development Act of 1925. This Act imposed a general tax of £1 on every adult male native, and a local tax of 10s. per hut on natives living in reserves. It created a Native Development Account,⁴ which is compiled in two portions, A and B. Into the 'B' account are paid the proceeds

¹ *Report of the Interdepartmental Committee on Native Education, 1935-6*, U.G. 29, 1936, p. 10.

² *Ibid.*, p. 19.

³ See Chap. VIII, p. 331.

⁴ See Chap. X, p. 555.

of the local taxes, and this section of the fund is used for local government purposes. Into 'A' account, from which expenditure on education is met, is paid the contribution of £340,000, and a proportion originally fixed at one-fifth, but subsequently fixed by Act 49 of 1935 at two-fifths of the general tax.

In assessing the merits of this system it seems sufficient to refer to the report of the Native Economic Commission of 1930-2.¹ 'It is not usual in treatises on Public Finance to consider taxation and public expenditure from the point of view of any one class of persons; the expenditure which the State considers necessary is regarded as a charge against the whole community, and it is the task of the Government to distribute this equitably among the various classes of persons which constitute the State.' Before the fund was created an advance of £223,644 was made to the provinces for native education, and this debt has constituted a heavy charge on it. It was calculated that the amount derived from the general tax would increase by 1·6 per cent. per annum with the estimated increase in the native population; but it is clear that, unless the facilities provided at the time of its inception were to be accepted as sufficient, even an income increasing in proportion to the population would not be adequate for necessary expansion. In fact, the revenue from the general tax has not increased in accordance with this estimate, partly because the number of taxpayers has not increased at the rate assumed, and partly owing to the failure to recover the full amount of tax in years of depression. In the years 1931-4 there was a steady decrease in the income of the fund, and the Native Affairs Commission in 1933² stated that so far as the fund had to meet the reasonable and accepted charges for native education it was bankrupt. In 1935-6 the fund would have shown a large deficit had not the government increased the contribution from the general tax to two-fifths for future years. The annual increase of income under this arrangement is calculated at 1 per cent.³ The total revenue of the fund in 1934-5 was £586,412, or less than one-eleventh of the money spent on European education, while the expenditure per head of native population (though

¹ *Report*, U.G. 22, 1932, para. 1058. See also Chap. XX, p. 1407.

² *Report*, U.G. 3, 1934, p. 13.

³ *Report*, op. cit., U.G. 29, 1936, p. 47.

higher than in any other British African territory save Zanzibar) was one-fortieth of that per head of European population. Under the new arrangement this proportion will be slightly altered in favour of the native population.

The fund is expended almost entirely in the form of grants-in-aid to schools under the control of missions. In Natal alone has provision been made on any considerable scale for government native schools; this development began in 1918, when the government took over some schools previously managed by the American Mission Board, and there are now eighty such schools under local committees which include representatives elected by parents, the committee being under the control of the Education Department. There has been no increase in the number of these government schools in Natal for many years, largely owing to their greater relative cost. The Transvaal and Cape have each one state native primary school under the European School Board of the district. The Cape has made provision for native education on a more generous scale than the other provinces; when the grant was fixed in 1922 its share, based on previous expenditure, was £240,000 out of the total sum of £340,000. Under its more liberal form of grant it has been found possible to give free primary education, whereas in the other provinces the schools charge fees of from 12s. to 15s. a year.¹

The general basis of the grant to schools is the payment of salaries of teachers; the practice in the payment of grants for furniture and equipment varies. While all provinces pay teachers' salaries in primary schools, in the secondary schools the Cape pays two-thirds of the salaries, while the other provinces meet the full cost. In 1934 the total number of state and state-aided schools was 3,133, of which 1,686 were in the Cape. The enrolment was 324,649, of whom girls slightly outnumbered boys, and the average attendance was 277,168. It appears that over 70 per cent. of the native population of school age are receiving no education. Of those who go to school 57 per cent. are in the sub-standards, only 2·4 per cent. in Standard VI, and less than 2 per cent. in secondary and higher institutions. The corresponding

¹ J. van der Poel, 'Native Education in South Africa', *Journal of the Royal African Society*, vol. xxxiv, no. cxxxvi, 1935, p. 322.

figures for the European population are 18 per cent. in the sub-standards, 10 per cent. in Standard VI, 16.5 per cent. in secondary and higher education. Of the total native population one in every 1,000 receives secondary and higher education; of the European, thirty in every 1,000.

In the mandated area of South-West Africa the administration pays the salaries of teachers and supplies the furniture and equipment in the mission schools, of which there were in 1936 thirteen for coloured children, with an enrolment of 801 pupils, seventy for natives, which were registered and eligible for government grants, and three for training native teachers. In the same year the total number of scholars in all schools, aided and unaided, was 5,723; state expenditure per head was 11s. 2d. The expenditure on coloured pupils was £8 19s. 3d. per head, and on European pupils, who numbered 5,723, £19 15s. 3d. per head.¹ Few non-European scholars proceed beyond the primary stage.

The position of missionary bodies in the Union is somewhat different from that which they occupy in other British territories. The control which the state assumes in return for its financial assistance is far-reaching: in particular, the payment of the salaries of teachers by the state tends to lead them to regard themselves as state servants.² There has been in the Union a wider divergence than elsewhere between the policy of government on native affairs and the views held by missionary bodies, and this tradition still influences the attitude of a considerable section of Europeans towards mission education. There have, even in modern times, been occasions when the official attitude towards missionary bodies has recalled something of the feeling which Dr. Philip provoked among settlers in the first half of the nineteenth century; a noteworthy instance of this occurred during the controversy on the colour-bar legislation in 1926. There is another point of importance. Native opinion is beginning to show itself impatient of missionary control, as is evidenced by the growth of the separatist churches. A list drawn up in 1932 comprises no less than 326 African separatist bodies.³

¹ See Table XI at end of chapter.

² J. H. Oldham and B. D. Gibson, *The Remaking of Man in Africa*, 1931, p. 123.

³ E. H. Brookes, *op. cit.*, Appendix II.

There are wide differences in the extent to which native parents are associated with the management of schools; some missions oppose the formation of local committees, while other denominations regularly establish advisory bodies representative of the native community. These are obligatory in government schools and are recommended for aided institutions in Natal; in the Cape they may be established under the Education Ordinance, with powers similar to those of a School Board; in the Free State they are a part of the machinery for amalgamated schools; and in the Transvaal they exist for 'rural community schools', but elsewhere are not officially recognized. The Interdepartmental Committee on Native Education,¹ while acknowledging that when first constituted an advisory body may cause extra labour, considered that, in view of the importance of creating a link between the school authority and the parents, local school committees should be established wherever possible.

The same committee strongly recommended that the control of native education should be transferred from the provinces to the Union Department of Education, and that the Native Affairs Commission, which at present allocates funds to the provinces for native education, should be eliminated. The proposal was that a new Department of Native Education should be set up under the Minister of Education, with a National Board of Native Education. It appears that this proposal was referred to the Natives' Representative Council at its first meeting in December 1937, but that the Council unanimously rejected the proposal.² The Interdepartmental Committee on Native Education also advocated the formation of a Native Education Fund to take the place of the Native Development Fund. The present system of block grants to the provinces was considered inelastic and incapable of expansion, and it was suggested that the state's contribution should be in the form of an annual *per caput* grant.³

(e) *Higher Education for Natives*

It may be taken that though entry to the universities is technically open to natives, it is in practice closed. Union policy has con-

¹ *Report*, op. cit., U.G. 29, 1936, p. 69; and R. F. A. Hoernlé, 'Native Education at the Cross-roads in South Africa', *Africa*, vol. xi, no. 4, 1938.

² *Manchester Guardian Weekly*, Jan. 28, 1938. ³ *Report*, op. cit., U.G. 29, 1936, p. 60.

centrated on the provision of higher education for natives at the South African Native College at Fort Hare, the creation of which was the direct result of a recommendation made by the South African Native Affairs Commission of 1903-5. Classes were first opened in 1916, and in 1923 it was incorporated under the Higher Education Act 30 of 1923, and as such receives from the Union the grant calculated on fee income which is available to other institutions of the same class. Fort Hare, however, only receives the portion of the grant based on fee income, whereas the other university institutions have a grant based on fees, endowments, and grants from local or other bodies. Fort Hare is also supported by the Transkeian Council and High Commission administrations. Its constitution declares its character to be that of a Christian college, though open to non-Christians. It prepares students for the degrees of the University of South Africa, an external examining body, and its courses are regulated by the requirements of these degrees; by 1936 over fifty students had obtained the B.A. degree, and last year two were presented for their B.Sc. The first woman graduated in 1928.

Great attention is given to Bantu studies, and of late years the college has opened classes in agriculture, maintaining a farm of 1,600 acres for this purpose; it has now become the centre of the Union scheme for educating native medical aids, which was made possible by the grant of £75,000 from the Witwatersrand Chamber of Mines. It is expected that this course will turn out ten graduates annually.¹ The total enrolment of students from 1916 to 1934 was 570. It was stated in 1934 that of past students 106 were ministers of religion, 139 teachers, 57 secretaries and clerks, 22 agricultural demonstrators, and 8 doctors. These last obtained their medical training abroad; seven of them are now practising in the reserves, the eighth among the native community on the Rand.

(f) *The Content of Native Education*

The teaching given by early missionaries was closely linked with their work of evangelization; as early as 1854, however, the cause of practical training was taken up by the Government of the Cape Colony under Sir George Grey, who in that year promised a

¹ See Chap. XVII, p. 1184.

subsidy to missions which would undertake to train native youth in industrial occupations. Institutions were subsequently formed at Healdtown, Lovedale, and elsewhere, but these were mainly devoted to the training of artisans; the ordinary school courses for long remained of a literary type, dominated by the examination standards of the European schools. A competent observer who began his career as a teacher in one of these schools has described the type of education as false and superficial.¹ The unsatisfactory nature of the instruction given added point to the arguments of those who opposed the extension of education to natives; they had some grounds for saying that education as then pursued seemed destined, in the words of Rhodes, to produce a nation of preachers and editors.

In truth, the controversy between those who held a 'humanist' view of native education, and their opponents, reflected something more than divergent conceptions of educational theory. To the one side, education of a European type symbolized the grant of equal opportunities to natives; the opposition of the other side reflected its view that the position of the native in the economic structure must always remain subordinate. The merits of the educational issue were obscured, on the latter side, by a display of self-interest, and on the former by a somewhat uncritical idealism. The controversy which was provoked by proposals to extend education to the working-classes in Great Britain turned equally on issues which had little reference to educational theory; and when the President of the Royal Society could urge in 1807 that the education of the labouring classes would be prejudicial to their morals and happiness,² his logic differed from that of the South African farmer mainly in the terms in which it was expressed.

In most countries of the world dispassionate study has only been given to the content of education when it has been accepted that it can no longer be confined to a special class, or directed to specialized ends, but must extend progressively to the whole population. That decision is one of general policy rather than of educational technique; once it is taken the major problem then

¹ E. W. Smith, *The Golden Stool*, 1930, p. 298.

² J. E. G. de Montmorency, *State Intervention in English Education*, 1902, pp. 222-3.

centres on the evolution of a suitable content for that range of education which can be given to the majority of the population with the greatest benefit to the social structure as a whole. In those conditions the educationist in his choice of method is increasingly controlled by the influence of outside opinion; education, in other words, becomes largely a co-operative effort. As regards the content of the more advanced or specialized stages of education, experience shows that its character and scope ultimately depend less on any educational theory than on needs connected with the positions which the products of such education will occupy, or the extent of the demand which society in its different activities makes for them. The educationist has to adjust his methods to these facts.

If something of the spirit which animated the older controversy is still seen in South Africa, the approach to the question has been modified by the tacit acceptance of the fact that education must in time be extended to the native population at large; the crucial question has become that of the type of education which should be given to it in the comparatively short period to which, for many years at all events, the school life of the majority of the Bantu population will be confined. As regards more advanced education, the type of opinion which would at one time have emphasized its radical unsuitability to Africans, now tends to concentrate on the efficacy of measures, such as territorial segregation or the colour-bar legislation, designed to confine the product of Fort Hare or similar institutions within the orbit of native life, and to prevent him from competing in the white economy. This change of attitude, for instance, seems to characterize the Dutch Reformed Church, which is taking an increasing part in educational activity. Attention is, in short, now directed less to finding reasons against the higher education of the native than to regulating the field in which he can make use of it.¹

Of the more formal examinations of policy which have been made in recent years, those conducted by the Native Economic Commission of 1930-2 and the Interdepartmental Committee on Native Education appointed in July 1935 are the most important. The former reflects a stage in the approach to native questions

¹ See speech of General Hertzog, *House of Assembly Debates*, vol. xxvii, 1936, c. 4086.

on which Union thought has already made some considerable advance. Assuming that there was little chance of a substantial increase in the funds for native education, the Economic Commission¹ confined itself to proposals which would turn the existing provision to better account. The recommendations made by the majority of its members showed a restricted vision of the scope of educational effort. Their view was that societies at the African level of development have educational needs which precede ordinary school education, involving, in particular, the conquest of beliefs in supernatural forces which are inimical to progress. 'Education', they write, 'must aim at transforming the native's whole outlook on life. The European bases his education on the three R's. But for the tribal native there is a great deal that precedes the three R's, and that is definitely more important than the three R's.'

The Interdepartmental Committee made a more comprehensive and a more informative approach to the problem. It included the heads of all the provincial Native Education Departments, and its report² may be taken as representing the view of the more progressive educational authorities of the Union. They recognized the essential connexion between the content of education and the environment of adult life. 'The education of the white child', they write, 'prepares him for life in a dominant society, and the education of the black child for a subordinate society.' In framing their views regarding the future of education they had to choose between the assumption that the political or social barriers imposed on the native would disappear, and the acceptance of the fact that the conception of segregation would continue to dominate policy. They thought that the honest course was to take the latter alternative. They nevertheless held that it is possible to raise the general educational level in a manner which is not incompatible with the frank recognition of the barriers to which they referred. Rejecting the suggestion that any advance can be made without an increase in literacy, they recommended that every native should receive at least an elementary education and that those who could benefit by further education should be

¹ *Report*, op. cit., U.G. 22, 1932, paras. 627-30

² *Report*, op. cit., U.G. 29, 1936, pp. 87-9, 106, 499.

enabled to proceed to it. They drew special attention to the short average school life of the native, roughly three years on a liberal calculation, and stressed the need for a curriculum which would be something more than a mere preparation for a further course which the vast majority would never undergo. In the case of the older pupils, they urged the need of substituting a course of teaching with a practical bearing which would be obvious to them, for the repetitive learning appropriate to young children. While recognizing the value of manual training for its own sake, they attached little importance to the teaching of local crafts which are becoming obsolete; they recommended, on the other hand, the development of agricultural training, and the training of women as itinerant teachers of child welfare and 'general home activities' on the lines of the Jeanes system.¹ These recommendations may have an important bearing on native education in the future.

It is noticeable that the Transkeian Territories General Council has taken particular interest in agricultural training. A farm was established at Tsolo in 1904, to which a school was attached in 1913, and a second was opened at Teko in 1921. In 1930 Pondoland instituted its own school at Flagstaff, which has now come under the United Transkeian Territories Council. In 1930 the Union Native Affairs Department started an agricultural school for the Ciskei at Fort Cox. These are institutions of some importance, well supported financially, and directed by European principals. They take students after passing Standard VI and give them a two-year course on the farms attached to the schools. Since 1916 a staff of native agricultural demonstrators recruited from the students at these schools has been gradually developed till in 1935 it numbered over 250. The services of the demonstrators have been sought as far afield as the Belgian Congo. There is some fear, however, that it may not be possible to keep up these schools; the demand for agricultural demonstrators is, for various reasons, already slackening, and shows signs of decreasing further.

A significant omission from the Interdepartmental Committee's Report is adult education, though many education officers realize its great importance.

¹ *Report*, op. cit., U.G. 29, 1936, paras. 556, 572. See below, p. 1228.

(g) The Linguistic Problem in Native Schools

As an interesting chapter of the report of the Interdepartmental Committee on Native Education of 1935-6¹ shows, the question of language is of unusual complication, not merely because there are within the Union seven recognized native languages,² with large multi-vernacular areas in some of the towns, but also because there are two European official languages. Up to about 1900 English had everywhere been given prominence at an early stage in mission schools, to the exclusion of the native languages; it is only of recent years that the value of a mother-tongue medium of instruction has been appreciated, or that regulations have prescribed a native language as a course of study.

The matter is still marked by a strong conflict of views. Educated native opinion resents anything which would prevent a maximum school period being devoted to learning English; it is a phenomenon seen equally in the coastal areas of West Africa, and was common in India before the 'nationalist' revival. There are also Europeans who ascribe the emphasis now laid on native languages to the unfortunate influence of the 'older anthropological school' which, in their view, plays into the hands of supporters of segregation by keeping alive tribalism.³ The official regulations, accepted with reluctance by some missionary bodies, now prescribe that the language of instruction shall be the mother tongue, in Natal for six years, in the Cape and Free State for four, and in the Transvaal for two. Thereafter an official language is to be introduced as the medium as rapidly as possible. In practice, the official language used as a medium is almost everywhere English. In all primary schools a native language must be taken as a subject, though in the Free State and Transvaal Afrikaans may be substituted by pupils whose mother tongue it is. In all the provinces one of the two official languages must be taught in all classes, though only orally in the first year. In the Free State the other official language is usually also taught, so that a pupil who proceeds through the primary school is for four or five years of the course taught three languages.

¹ Ibid., paras. 412-51.

² E. H. Brookes, *op. cit.*, p. 141. See Chap. II, p. 45.

³ See Chap. III, p. 81.

III. SOUTHERN RHODESIA

(a) The European Schools

Generous provision for European education has been a prominent feature of Southern Rhodesian policy since the first Education Ordinance of 1899, when grants on a £ for £ basis were made to the schools then conducted by missions. On the recommendation of a committee appointed in 1908, government assumed the direct control of all primary education and established the first state secondary school. Six of the seven original aided mission schools are still in existence; the additional schools established by government since it took up the responsibility for European education numbered seventy in 1935; seven of these, and five of the mission schools, give education classed as secondary. In order to provide facilities in the outlying areas, grants are made to 'farm schools' in country districts, in which the parents supply the buildings and furniture while government provides the teacher's salary and equipment. In 1934 there were sixty-three such schools. In 1935 the government sought to encourage the attendance of rural pupils at more efficiently organized schools by the provision of hostels for boarders; this led to a reduction in the number of farm schools to forty-six. A technical school at Bulawayo, founded in 1927, offers a five-year course for boys who aim at acquiring professional qualifications, though the majority leave the school for private employment at the end of the third year of the course. In 1936 there were 198 pupils enrolled in this institution, and 10,532 in all European schools. Primary education was made free and compulsory in 1931. Since 1935 secondary pupils pay no tuition fees, and a 10 per cent. rebate is given on boarding fees if paid before a specified date. The gross expenditure on European education in 1936 was £323,179 and the cost per pupil £30 13s. 9d. This high cost is due not only to the provision of free education but to the large proportion of pupils who are of necessity boarders.

The territory is, in addition, exceptionally favoured in the matter of endowments. The Beit Bequest offers annually for competition seventy-two scholarships of £27 per annum each, of which forty-two are tenable in primary and thirty in secondary schools. It also awards each year thirteen bursaries of £100-£60 per annum,

and three engineering scholarships of £150 per annum, tenable at South African universities, and three engineering fellowships of £375 per annum for students taking post-graduate courses overseas. Three of the Rhodes Scholarships of £400 per annum tenable at Oxford are earmarked for Southern Rhodesia.

From the first, European education in Southern Rhodesia has been closely linked with the Union system. Many teachers have been trained in the Union, and at an early stage schools adopted the standards of the Cape. Secondary education has up to now culminated in the Matriculation Examination of the South African Joint Board. This policy was endorsed by the Education Commission of 1929,¹ but during 1936 Southern Rhodesia struck out a new line for itself. An officer of the Board of Education in the United Kingdom had been invited to investigate European education in Southern Rhodesia, and his report was presented in 1936.² As a result of this report important changes have been made: education affairs can now be dealt with by the Governor in Council instead of by vote in the legislative assembly; the inspectorate is now (through the Chief Inspector) directly responsible to the Minister and not to the Director of Education. One of H.M. Inspectors of Schools from the Board of Education has been appointed Chief Inspector for two years, and so seriously is the matter viewed that the Prime Minister has himself taken over the Education portfolio. In October 1937 he made a speech to the House indicating the policy it was now proposed to follow, which would later be embodied in an Education Act.

Primary education, clearly divided from secondary education, is to be provided up to the age of 12 years, and to be free from a departmentally imposed syllabus. The school-leaving age is to be raised to 16 years, and when the child is 12, parents will have a choice of three types of secondary education: modern, academic, and technical, the first course being free from all external examination. In academic schools the practice has been to take the South African Matriculation in Form V. This is to be abolished and the Cambridge School Certificate is to be taken a year earlier, the Form V year being devoted to post-certificate work.

¹ *Report*, C.S.R. 27, 1929, pp. 106 ff.

² Southern Rhodesia, *Report of the Education Commissioner*, C.S.R. 25, 1936.

One of the more important ideas underlying these proposals is to give effect to a policy advocated in the Hadow Report on the Education of the Adolescent:

'that all the children of the country who do not go forward to "secondary education" in the present and narrow sense of the word, should go forward none the less to what is, in our view, a form of secondary education, in the inner and broader sense of the word, and after spending the first years of their school life in a primary school should spend the last three or four years in a well equipped and well staffed modern school under the stimulus of practical work and realistic studies, and yet, at the same time, in the free and broad air of a general and humane education'.¹

It is contended that secondary education has hitherto been academic and admittedly unsuited to the majority of children.

In Southern Rhodesia grants-in-aid to schools for the education of coloured children were first made in 1903. In 1916 two government primary schools were established for this purpose. There are now thirteen schools for coloured and Indian children, of which eleven are maintained by government; the total enrolment in 1936 was 1,135 and the total government expenditure £11,409.

(b) *Native Education*

Southern Rhodesia shares with the Union the system under which the majority of native schools are provided by the missions. Grants are made on a *per caput* basis, increasing in accordance with the standard of the school. In addition, government pays part of the salaries of teachers and contributes towards special courses for the training of native teachers and towards the production of vernacular publications. Such grants in 1935 totalled £52,926, while the pupils enrolled in aided schools numbered 105,466; of these 49,999 were girls. The disproportion in the cost to government of native and European education is greater than in the Union, the figures being £30 13s. 9d. for each European and 13s. 9d. for each native pupil. Government is directly responsible for two schools founded in 1920 and 1921 at Domboshawa and Tjolotjo with the specific aim of giving a training in crafts,

¹ Quoted in Southern Rhodesia, *Report*, op. cit., C.S.R. 25, 1936, p. 16.

which can be turned to account in the improvement of conditions in the reserves, though this is accompanied by the proviso that natives must not be trained in such a way as to enter into competition with Europeans. These schools have become the pivot of a policy adopted in 1929, which emphasizes the principle that school instruction must rank as only one of many agencies directed towards the betterment of native life. In that year native education became the function of a Department of Native Development, with an Education Officer as Director, advised by a board representative of the Native Affairs Department, the European and Native Education Departments, the Medical and Agricultural Departments, the Native Land Board, the missions, native welfare societies, and the general public. In 1935 a change was made, and all departments connected with native administration and development were placed under the Secretary for Native Affairs, who is also Chief Native Commissioner and Director of Native Development. The Education Officer became Director of Native Education instead of Director of Native Development. To many the change has been welcome on the ground that it makes for efficiency by reducing departmentalism; others have felt that native education has lost in independence.

The original view held of the purpose of native education is shown in the definition of a first-class school in the Education Ordinance of 1903 as one in which 'pupils are taught industrial work, receive a sufficient knowledge of the English language, and are trained in habits of discipline and cleanliness'. Some measure of the more extended view now taken is afforded by the fact that the late Director of Native Development, Mr. H. Jowitt,¹ defined its aims as 'the effective organization of the African's experiences so that his tendencies and powers may develop in a manner satisfactory to himself and to the community in which he lives'. It has been sought to give practical expression to this conception, not only in the course of training for school teachers, but in the development of instruction to adults by means of demonstration in improved methods of house building, village planning, and agriculture. The majority of these demonstrators are trained at Domboshawa. Particular importance has been attached to the

¹ *The Principles of Education for African Teachers*, 1932, p. 48.

training of agricultural demonstrators in view of the necessity for a rapid improvement in methods of cultivation in the reserves. After a three-year course in agriculture these men are sent to the reserves; whereas in the Union and Kenya the work of the demonstrator is mainly instructional, in Southern Rhodesia he is expected to convey lessons of better cultivation by personal cultivation, while his advice is at the same time at the disposal of his neighbours. In 1935 there were fifty agricultural demonstrators with 1,722 plots, an increase of 28 per cent. over the 1932 figure.

Another aspect of this broad educational policy was the adoption in 1929 of the recommendation of the Phelps-Stokes Commission¹ regarding the establishment of Jeanes schools in Africa. This type of school had its origin in a bequest by Miss Anna T. Jeanes for the training of visiting teachers for negro schools in America. The Jeanes teacher is given charge of a group of schools, and is expected to stay at each centre for some days and assist the village schoolmaster in his work and give friendly advice. One aim of the system is to fit the bush school into local community life by providing interesting teaching which is in close relation to local needs.² A Jeanes course for men at Domboshawa gave instruction in 'community welfare work' based on the special needs of the area, as well as in school subjects and in the art of teaching. The students were as a rule married men, who came from mission schools and had previous experience of teaching; they were nominated by missions to which they returned on completion of their training, and during the course their wives received instruction in maternity and child-welfare work. Training at Domboshawa was suspended in 1935; it was considered that sufficient men had been trained and that, although the men chosen for the course were the best the missions could offer at that time, the teachers who were leaving the ordinary training courses had a better knowledge of teaching than many of the Jeanes teachers. Girls are trained in a Jeanes school at Hope Fountain, a station of the London Missionary Society, as 'home

¹ *Education in East Africa* (ed. T. Jesse Jones), 1925.

² Further mention of Jeanes training is made in connexion with Jeanes schools elsewhere; see below, pp. 1252-3.

demonstrators'; the course is similar to that formerly given to the wives of Jeanes teachers.

An experimental course for the training of native chiefs was started at Domboshawa in 1936.¹

IV. BRITISH COLONIAL AREAS

(a) *Education Policy*

In education, as in the other social services, each British dependency has its own local department, which retains a large measure of initiative and control over policy and administration. The British Government has, however, announced certain principles of general application for the guidance of colonial governments in educational matters. These principles have been adopted by successive Secretaries of State upon the advice of the Advisory Committee on Education in the Colonies, which was set up in 1924, at first with the title Advisory Committee on Native Education in the Tropical African Dependencies.²

The first of these declarations of policy was made in 1925.³ The central problem was considered to be the finding of ways to improve what is sound in indigenous tradition. 'Education should be adapted', said the white paper, 'to the mentality, aptitudes, occupations and traditions of the various peoples, conserving as far as possible all sound and healthy elements in the fabric of their social life.' Education was to raise up leaders from among the people, as well as to assist the peasantry towards better standards of life. The greatest importance was to be attached to religious teaching and moral instruction. The most effective method of training character was considered to be the residential school. The importance of women's education was recognized, but great stress was laid upon the dangers which might attend any action in this matter, which did not take the fullest account of the subtle social reactions which would probably follow.

At that time education in the African dependencies, with the

¹ *Race Relations*, vol. iv, no. 1, 1937, p. 24.

² See Chap. VI, p. 161.

³ *Education Policy in British Tropical Africa*, Cmd. 2374, 1925. In 1847, however, the Privy Council Office communicated to the Colonial Office a considered statement (Colonial Office Library, *Miscellaneous Pamphlets*, vol. i, no. 1) on educational policy for the coloured races. See H. S. Scott, 'The Development of the Education of the African in Relation to Western Contact', *The Year Book of Education*, 1938, pp. 707-11.

notable exception of Northern Nigeria, was still mainly in the hands of various missionary bodies, and the government Education Departments were at an early stage of their development. The British Government announced¹ that it welcomed and would encourage all voluntary educational effort which conformed to its general policy, but it reserved to itself the direction of educational policy and the supervision of all educational institutions, by inspection and other means. It was recommended that in all the dependencies advisory boards for education, both central and provincial, should be set up. These advisory boards should include representatives of the Medical, Agricultural, and Public Works Departments, together with missionaries, traders, settlers, and representatives of native opinion.

It was essential at the same time to announce some decision upon the conflicting opinions then being canvassed, on the issue whether the governments should conduct their own schools, or whether they should, on the other hand, leave the management of the schools to the missionary bodies, and limit the activities of the Education Departments to the functions of assistance, advice, and supervision. The statement of policy took up a position which lay plainly half-way between the rival opinions. Provided that the required standard of educational efficiency was reached, aided schools were to have a place as important as that of the schools conducted by the governments themselves.

The next statement of policy related to the place of the vernacular in native education.² It was recognized 'that vernaculars must be used in the first stages of elementary education'. Encouragement was given to the displacement of vernaculars, spoken by limited numbers, by dominant or union languages.³ English was, however, regarded as a necessity in all intermediate, secondary, and technical schools, and 'if it is a necessity in these, its inculcation must commence in the higher standards of the elementary schools'. This language policy has been endorsed by the resolution of the Council of the International Institute of African Languages and Cultures.⁴

¹ *Education Policy in British Tropical Africa*, Cmd. 2374, 1925.

² *The Place of the Vernacular in Native Education*, African 1110, 1927.

³ See Chap. III, pp. 68-9, 88-9, 91-2.

⁴ J. H. Oldham and B. D. Gibson, op. cit., Appendix A.

In a *Memorandum on Native Policy in East Africa* issued in 1930¹ the British Government declared that its objectives included 'the spread of education in the widest sense'. Such education was to be made available for adults as well as for children and youths, and was to aim not merely at inculcating efficiency in clerical duties or handicrafts, but at raising the standard of knowledge and intelligence of the whole community, with a view to effecting a transformation in the daily lives of the people.

The continued study of the subject by the Advisory Committee led to increasing stress being laid upon the importance of bringing education into the closest relationship with all the other agencies of social improvement. The emphasis which had from the first been laid upon the necessity for educating the whole community, not only its children, was maintained and fortified by the working out of methods by which this might be undertaken.² It was realized, too, that the extreme caution which had been recommended in the matter of women's education had, perhaps, been over-stressed. In any case, the decade following the white paper of 1925 witnessed a number of experiments in the education of girls which demonstrated that, even in Moslem areas such as Zanzibar and Northern Nigeria, a bold policy could be justified. The Commission on Closer Union in East Africa³ advised a less cautious line. Yet education in the dependencies, together with the other social services, has been weighted strongly in favour of the male part of the population. Dr. Mary Blacklock⁴ published a report on this matter in 1936, and put forward the view that a dangerous disequilibrium was being allowed to develop between the care of the men and the neglect of the women. This view was endorsed by the Advisory Committee and accepted by the Secretary of State, who distributed Dr. Blacklock's report to all colonial governments for their consideration and guidance.

No separate statement of policy relating to secondary and university education has been published; but the Committee has

¹ Cmd. 3573, 1930.

² *Memorandum on the Education of African Communities*, Colonial 103, 1935.

³ Cmd. 3234, 1929, p. 74.

⁴ 'Certain Aspects of the Welfare of Women and Children in the Colonies', *Annals of Tropical Medicine and Parasitology*, vol. xxx, no. 2, 1936, pp. 221-64.

drawn attention¹ to the increasing demand of the African for higher education, which tends to be met at present, by those who can afford it, by study at European or American universities. It is pointed out that the resultant efflux is socially and intellectually undesirable, and that the courses provided at these institutions are unsuitable to African conditions. Another unfortunate result of this situation is the orientation of a great deal of school education towards the curricula required by European examining institutions. The committee recommended, therefore, that plans be made for the development in Africa of selected institutions of university standard, having regard in their curriculum to the needs of the African environment; in the interests of economy such institutions should, so far as possible, serve several territories. It was admitted that they must in the initial stages be dependent upon some English university, and the committee suggested that London University should be asked to modify its requirements to suit the needs of Africa.

It appears that the publication of these recommendations was postponed pending the report of the commission which was appointed in 1936 to consider the question of higher education in East Africa. Part III of that report² deals with 'Advanced Education', and is understood to have been accepted by the Secretary of State on the advice of the Advisory Committee. It may, therefore, be regarded as a statement of policy on advanced education in East Africa, and the general principles which it formulates are clearly of wider application. The Commission viewed as inevitable and desirable the development of institutions in Africa of university rank, though they pointed out the dangers of a too hasty advance. They did not hesitate at the financial implications of such a policy. The report shows them to have considered carefully the claims of primary, secondary, and post-secondary education upon the limited funds available, and to have decided that the great expense of university-type education, though it may sometimes appear disproportionate, should be worth while even in the interests of primary education. Money spent on higher education would return to primary education in the form of

¹ A.C.E.C. 44/33, A.C.E.C. 24/35, A.C.E.C. 7/36 (unpublished).

² *Report*, op. cit., Colonial 142, 1937.

teachers, to health in the form of doctors, to economic production in the form of agricultural, veterinary, and forest officers. Advanced education is, therefore, to be of a definitely utilitarian type; it is, however, stressed that a technician, to be successful in his profession, needs wide culture and a strong character, and the secondary schools and post-secondary colleges must endeavour to supply these needs.

It may be convenient here to refer to Part II of the Commission's report, which concerns primary and secondary education. Its recommendations endorse the lines of earlier policy, but there are important differences of emphasis. The Commission agree that governments should continue to work through the missions, but urge the need for closer inspection and control and for a drastic improvement of primary education. They also point out that missions have little prospect of expanding financially, and that practically all new developments must, therefore, come from government resources. In particular, new government secondary schools should be established. They stress the vital need for further education of women and girls and for the development of adult education. The report of the Commission has a special significance both in its optimistic view of African capabilities and in its belief that over-caution may have as many disadvantages as over-rapidity.

(b) Education Administration

The declaration of a guiding policy for all the dependencies has not produced strict uniformity in the manner in which colonial governments have interpreted that policy. Local circumstances varied greatly at the time when it was declared, and the local developments since 1925 have varied correspondingly. Where the missions had already covered most of the country with a network of schools—as in Uganda and Nyasaland—the governments have worked almost entirely by assisting and guiding the missions. Where the most suitable channel through which to direct education was found to be the native authorities—as in Northern Nigeria and the Lake Province of Tanganyika—native administration schools have become the basis of educational policy. In other circumstances, as for instance in Zanzibar and on the

Tanganyika coast, schools conducted directly by the government are a predominating element in the school system.

The healthiness of a system which allows such adaptations to local needs cannot be questioned; but the very existence of this variety in the types of school creates a special need for an agreed nomenclature, applying to all the dependencies, so that such terms as 'elementary', 'primary', 'intermediate school', 'central school', 'junior secondary', 'college', 'trade school', and 'technical school' may have some constancy of meaning.¹ Confusion is caused by the use of these terms in different senses in almost every territory. Worse than that, the lack of precision in nomenclature has tended to the application of high-sounding titles to schools whose performance does not justify their names. This, in Africa, has had regrettable results. A boy who has completed his course at a so-called 'college' may face bitter disillusionment if he attempts to assert himself in competition with the product of an overseas college. An African who has attended a so-called 'technical school' to be trained as an 'engineer' cannot be expected easily to reconcile himself to the fact that he is employable only as a mechanic's mate or a road ganger. When schools which, in fact, do little more than teach reading and writing are represented to be secondary schools, there results a tendency to cram the curriculum in the top classes with subjects which the children cannot assimilate, in order to justify the unjustifiable name, and not only is the process of creating genuine secondary courses rendered difficult, but the secondary course, if set up, tends itself to be 'overgraded' as a 'college' course. In this chapter the first six years of normal school life will be spoken of as 'primary', and the seventh to twelfth years as 'secondary', following the recommendation of the East African Commission of 1936-7.

In spite of all the local adaptations, however, some progress is being made in pursuing certain common objectives. There has in recent years been an increasing effort to relate education as closely as possible to the needs of African communities.

The criticisms levied against the system followed in the British colonies are numerous; they include the domination of British school examinations, the neglect of girls' education, and the

¹ *Report*, op. cit., Colonial 142, 1937, p. 35.

bookishness of some of the schools; but it can at least be said that these defects are now fully recognized. The main burden of criticism to-day is against the quantity quite as much as against the quality of the schools. It has been pointed out, for instance, that at the present rate of expansion in the Gold Coast, assuming that the number of children of school age remains as at present, universal education will not be achieved for 600 years. Such calculations are important and serious, but the premisses on which they are founded are open to question. The expansion of education ought to take place by geometrical progression; teachers train not only literate peasants, but more teachers, and not only teachers, but other social workers. In the present stage of development colonial education is—or at any rate ought to be—creating means of training teachers in large numbers which, in another decade or two, will make possible a much more rapid expansion of the school system. To extend the primary schools too widely, before the advanced institutions for training teachers and other African social workers are yet in working order, might not be the quickest way to universal education.

(c) *The Missionary Schools*

Although the original inspiration for missionary work was, no doubt, the desire to make converts, there was not lacking a broader purpose. This is best expressed in a well-known passage in Livingstone's journal: 'In the glow of love which Christianity inspires, I resolved to devote my life to the alleviation of human misery.'¹ There have, it is true, been certain bodies with whom the impulse to effect conversions has seemed to outweigh all other considerations; but it would be far from true to say that this spirit has been characteristic of missionary endeavour as a whole. The missionary in Africa came at an early stage under the influence of the fact that he was often the sole agent of civilization; his activity was, by the force of circumstances, extended over almost every field in which the deficiencies of native life appealed for his assistance. The increasing measure of state control envisaged by the Colonial Office memorandum of 1925 might have been unacceptable to the Protestant missions, had it not given a prominent place

¹ *Missionary Travels and Researches in South Africa*, 1857, p. 5.

to the formula that native education must be 'based on religion'. That formula, however, enabled the conference of missionary bodies on African problems, which met at Le Zoute in 1926, to extend a welcome to the policy laid down. In an important resolution¹ it accepted the fact that education is the proper function of government, but expressed the view that, as the education of natives could be of no value without religion, it should be left to a large extent in the hands of missionaries, aided by government subsidy and organized under government direction. The chief sphere of mission activity must lie in the field of primary and secondary education; higher and technical instruction should ordinarily be conducted by government through the agency of governing bodies on which missionaries are represented, though this should not prevent missions from conducting higher institutions, provided they conform to conditions laid down by government. The views of the conference regarding the use of native languages in education were in the main the same as that embodied in the Colonial Office memorandum of 1927.²

The Roman Catholic missionary societies have welcomed government assistance and supervision in their schools, but they have great difficulty in accepting any arrangements which might result in Roman Catholic scholars attending institutions not under the control of the Roman Catholic Church. Their position is, therefore, that they cannot regard a government or native administration school as a suitable one for their adherents to attend.³ In regard to the grant by governments of financial assistance to mission schools, the policy commended to colonial governments, on the advice of the Advisory Committee, is that grants should be given 'only to institutions that are managed and taught by the right kind of person', and that the utmost possible freedom should then be given to such teachers and managers.⁴ The statement of policy is so expressed as to make it plain to voluntary bodies that they can only expect government aid if their school staffs are as well qualified for educational work as the members of the government education service.⁵ Subject to this

¹ See E. W. Smith, *The Christian Mission in Africa*, 1926, p. 110.

² See above, p. 1230.

³ *The Catholic Times*, Oct. 15, 1937.

⁴ *Advisory Committee on Education in the Colonies, Memorandum on Educational Grants-in-Aid*, April 1933, Colonial 84, p. 5.

⁵ *Ibid.*, p. 6.

proviso, it is recognized that the expenditure on staff should be the basis upon which the governments calculate their grants in aid of mission schools.¹ This policy, however, immediately encounters the difficulty, that mission teachers rarely expect to be paid the full salaries which they could command if they were not giving their services from other motives. This difficulty, it is suggested, can be overcome if the government assumes, for the purpose of the grant, that the missionary body is paying a certain salary for a certain type of qualified teacher. If, then, the mission and the teacher agree on a lower salary, the balance of the grant may be used by the mission for other educational expenditure. The Commission on Education in East Africa expressed itself as extremely doubtful about the wisdom of this provision.² It has not, in practice, proved possible to enforce the provision that mission staffs must possess qualifications equal to those of the government education service. As standards rise, however, this question of securing adequately qualified staff in mission schools is becoming increasingly difficult: it may be expected to present the governments with complex administrative problems, and even more to impose a great strain upon the resources of the missions in money and in personnel.

The administrations exercise control over mission schools chiefly through inspection, and through regulations regarding the opening and closing of schools. It is clear that in most territories the inspectorate is at present quite inadequate for this purpose. Tanganyika, for example, has now an authorized establishment of six inspectors of education, but shortness of staff prevents the inspection of a number of assisted mission schools.³ Elsewhere there is evidence that schools, if inspected, are seen at very irregular intervals.

In most territories teachers in all assisted schools have to be registered, and a definite procedure is laid down which must be followed before a school is opened. In Southern Nigeria it has to be shown that a suitable person has been appointed as manager, that the teachers have the minimum qualifications and are registered, and that the land is occupied under title or with the consent of

¹ *Ibid.*, p. 10.

² *Report*, op. cit., Colonial 142, 1937, p. 37.

³ *Report to the League of Nations on Tanganyika Territory*, 1937, p. 122.

the local community. In Northern Rhodesia permission is obtained from the district authorities, who must consult the native authorities. In most territories, also, schools may be closed on the advice of the Advisory Council or a similar body, if they contravene the regulations regarding registration of teachers or the like; in Kenya they may be closed if they are held to be detrimental to the physical, moral, or mental welfare of the pupils. Kenya and Southern Nigeria add to these provisions the important rule that all schools, whether assisted or non-assisted, shall be open for inspection at all times, a penalty being prescribed for refusal. In Tanganyika, where the propriety of the use of rules regulating the opening of schools for the purpose of 'zoning' areas between different missions has been the subject of debate, schools giving religious instruction only have now been exempted from control. While administrative limitations on the areas within which missions operate may present difficulties, there seems ground for control in some districts, in order to discourage an activity on the part of some missionary bodies which resembles rather the process of pegging out claims in a mining area than a genuine extension of educational effort. It may be added that there is not in the British areas any discrimination between 'national' and 'foreign' missions, nor between missions of different denominations.

An important step in the co-ordination of activity has been taken in the association of official and missionary representatives in the local education boards or advisory councils which now take a large share in regulating educational matters. The institution of such bodies was an essential part of the recommendations of the Advisory Committee in 1925, and effect has been given to it in all territories. In Kenya separate councils have been constituted in connexion with the education of the four groups—European, Indian, Arab, and African. In Tanganyika, Uganda, Nyasaland, the Gold Coast, Sierra Leone, Nigeria, and the Gambia, Africans are now represented on the advisory bodies concerned with African education. The constitution of the Advisory Committee for Tanganyika may be quoted as typical. It includes the Director of Education as chairman, the Director of Medical and Sanitary Services, eight nominated representatives of missions, two of the Chamber of Commerce and Planters' Association, and two

Africans. In Northern Rhodesia and Kenya unofficial members of the legislative council are included in the advisory bodies. In some of the territories the Central Committee or Board of Education is supplemented by local committees; in Tanganyika and in Southern Nigeria, for instance, there are provincial committees; in other areas, such as Kenya and Uganda, there are district boards or committees. They advise regarding the management of elementary schools and the allocation of grants-in-aid; their members include representatives of the native authorities of the district. In Bechuanaland each tribal reserve has its local committee; an interesting result of the establishment of these committees was that the natives voluntarily offered to raise a levy for school purposes.

In Northern Rhodesia a few school committees consisting entirely of natives have been set up in the Northern Province, and in connexion with the government school at Ndola. In 1934 an Education Board which includes representatives of the paramount chief and his Kgotla was created for the Barotse Province. These Rhodesian committees are at present responsible for school attendance and the maintenance of buildings; it is hoped later to give them some financial powers, but there has been a good deal of opposition to the movement from missionaries, and it is not widely developed.

(d) Native Interest in Education

There is evidence in almost every area of a desire on the part of natives for increased educational facilities. The native authorities participate in educational work in some cases by raising special funds, in others by maintaining their own schools. The tribal levy raised in 1898 to found the Lerothodi Technical School in Basutoland produced over £4,000. Here there is an education levy of 3s. per taxpayer. In Bechuanaland tribal levies, imposed by request of the natives themselves, are in force in eight of the tribal areas. In Swaziland the native authority has taken a large share in creating the school at Matapa, which takes the place of the school founded by the Swazi rulers at Zombode. In Nyasaland the interest of native authorities in education has taken the form of requests that it be made compulsory, and in 1935 the Henga-Nkamanga

Native Administration passed rules to that effect for five villages within its jurisdiction. As a result the average attendance increased in each of these villages, that of girls being more than doubled in four of them. The teaching staff was also doubled. Other native authorities have asked for information regarding the progress of the experiment, though its extension to other areas would have to face less favourable conditions. In Uganda the native authorities of Bunyoro and Toro impose a special education tax of 1s. per head;¹ the Buganda Council was willing to impose rates, but this was considered undesirable on the ground that existing taxation was sufficiently high. In 1935 the moneys raised from native administration funds and education rates, to supplement those from the central government, amounted to £21,236, which was allocated through the district boards.

It is stated of the Local Native Councils of Kavirondo and Kikuyu, in Kenya, that they are more willing to raise the local rates for education than for any other purpose; the total sum voted by such councils in Kenya for education since their inception in 1925 to the end of 1934 was £92,414. In Kenya the Local Native Councils have been allowed to erect schools and provide boarding expenses of pupils, but the control and management of the schools are in the hands of the government. These schools are not to be confused with the independent schools which have sprung up in the Kikuyu reserve as a result of differences of opinion between the native community and certain missionary bodies. The existence of these independent schools, which are found in several territories beside Kenya, is of some significance. They are evidence that Africans may in certain circumstances not be content to allow those who control education to use the schools for purposes of which a large body of African opinion does not approve; and they constitute a warning that educationists in Africa may greatly increase their own difficulties, if they do not find means for associating African opinion with them.

In Tanganyika, in 1936, thirty-six of the seventy-four village schools financed entirely from public money were classed as native administration schools.² The present policy is to hand over the

¹ See Chap. X, p. 576.

² See *Report*, op. cit., Colonial 142, 1937, p. 40.

remaining government village schools to the native administrations wherever possible, and from the beginning of 1938 this is being done, except in the case of some schools in towns where no traditional authority exists. The buildings, furniture, and the maintenance of boarders are financed by the native administration, but the educational direction is under the supervision of the government. Teachers' salaries have been paid by government, but, following a policy of increasing gradually the responsibilities of native authorities, it is proposed to make a grant from central government funds to the native treasuries, to enable these salaries to be paid by the local authorities. In the case of the large government primary school at Moshi, a committee of local elders visits the school and offers advice.

By 1936 there were fifty-eight native administration schools in the Southern Provinces of Nigeria and the Cameroons, with 3,684 pupils, towards the maintenance of which the native treasuries contributed over £9,000 in 1936. In some areas the school management is in the hands of a committee, usually presided over by the District Officer. The Education Officer, where there is one, is a member, and in most places the committee includes representatives of the missions; the voting of funds is in the hands of the native administration, acting upon the advice of the District Officer. In other areas the native authority practically assumes all the duties of a manager. In the Northern Provinces of Nigeria the result of the restricted activities of missions in Moslem areas has been, that government has relied largely on the native administrations for the development of education, and the native treasuries bear the entire capital and recurrent cost of all elementary, middle, and girls' schools, with the exception of two government schools. In 1936 this cost was estimated at £44,467.

In the Northern Territories of the Gold Coast the introduction of indirect rule was accompanied by the policy of transferring to native administrations the responsibility for existing government schools.¹ One native authority took over this responsibility in 1935, and further transfers, with the establishment of new native administration schools, are expected shortly.

¹ See Chap. IX, p. 476.

(e) *Extent of Secondary Education*

Of the children now at school the great majority are in the primary stage, and a great proportion have a very short period of school life. It is, indeed, doubtful whether the figures supplied by administrations do not include considerable numbers, such as pupils in a certain class of mission 'bush' school, who cannot properly be said to be in receipt of any form of secular education, however that term be defined. It is noteworthy that Tanganyika has lately found it desirable to exclude from registration all evangelistic schools and catechetical centres.¹ It is no disparagement of the value of the work accomplished by missionary effort to say that this is one of the inevitable results of a system which leaves so much of the initiative in education to the missionary bodies. 'Few things', as was observed by the authors of *The Remaking of Man in Africa*,² 'make a stronger appeal to the imagination than the awakening desire for knowledge which finds expression in the tens of thousands of little village schools that are to be found throughout the length and breadth of the continent.' It is, in truth, the desire for school teaching rather than any doubts about his own faith which is often the inducement for the native to bring his children to the missionary. There are some bodies which are content to meet that desire with a smattering of religious teaching imparted by ill-trained native teachers, who are often paid at rates so low that they have to be supplemented by the cultivation and marketing of cash crops, operations which can be done only during 'school hours'.³ There are, however, many missionary bodies which would wish to combine a more effective type of education with their religious teaching, did their resources permit.

The diversity of practice and nomenclature makes it difficult to distinguish the primary from the secondary stage of school education. Secondary education can be obtained at four institutions in the Bechuanaland Protectorate. Swaziland and Basutoland have each 1 school classified as secondary, the Gold Coast 3, the Gambia 4, Sierra Leone 9, Northern Nigeria 12, and Southern Nigeria 30.

The East African Education Commission of 1937 briefly reviewed

¹ *Report to the League of Nations on Tanganyika Territory*, 1937, p. 120.

² J. H. Oldham and B. D. Gibson, *op. cit.*, p. 63.

³ *Report*, *op. cit.*, Colonial 142, 1937, p. 45.

in its report the existing state of secondary education in the territories covered by its term of reference. There were no facilities for the secondary education of girls in Kenya, Tanganyika, Zanzibar, Nyasaland, Northern Rhodesia, or Uganda. For boys, Kenya had as yet no schools of full secondary standard. Two grant-aided mission schools were of a junior secondary standard, and it was proposed to raise these and two further grant-aided mission schools to full secondary status by the end of 1940. Tanganyika had one government school at Tabora which, while not yet of full secondary standard, was in process of grading up to that position. There were also four assisted mission schools which did some work of a secondary character. In Nyasaland and Northern Rhodesia there was as yet no secondary education. In Uganda the government school known as Makerere College was the only place at which boys had completed a full secondary education. A number of assisted mission schools were, however, providing courses of a secondary character, and it was expected that in the near future there would be three mission schools giving a full secondary course, ten or twelve giving the first three years of secondary courses, and two mission schools giving the last three years of a secondary course.

In some areas the tendency has been to give vocational teaching to pupils in the post-primary stage rather than to take them further in secondary courses of a general type. That tendency has in the past been more marked in the East than in the West African courses, but it is now being emphasized in Southern Nigeria, and has been stimulated by the policy laid down by the Colonial Office Advisory Committee.¹ The report of the East African Education Commission may, however, be regarded as a warning against going too far in this direction. It is emphasized that vocational and general education are essentially complementary, but African communities cannot progress without individuals of general cultural education.

(f) *Vocational Training*

As we have seen, recent policy has been directed to giving something of a vocational bias to primary school education, by securing that the schools should teach not only reading, writing, and arith-

¹ *Educational Policy in British Tropical Africa*, Cmd. 2374, 1925, pp. 4, 7.

metic, but improved methods of agriculture and simple village handicrafts which will facilitate the improvement of native house-building, domestic utensils, cooking, and clothing. In practice, however, the lack of control by government over primary courses, and the very short school life of a large proportion of the pupils, have prevented any wide extension of this principle. Educationists will appreciate the fact that the necessary bias cannot be given to primary teaching merely by adding a short instruction in carpentry or cooking; the whole aspect of teaching has to receive a new direction, and, as the well-known example of the Moga School has shown, this requires teachers specially trained for the purpose.

There are, however, some instances of an attempt to vary the system of primary teaching in this direction. For instance, the syllabus for the 'central schools' (these may be regarded as upper primary) in Uganda, published in 1930, allots periods to agriculture, carpentry, and instruction in the keeping of native court records and the collection of poll tax. This course was substituted for the more literary 'middle school' syllabus in several of the schools of the Church Missionary Society.¹ A marked variation from the old-fashioned literary curriculum was made in the opening in 1934 of farm schools at Namutamba and Gulu in Uganda, by the Protestant and Catholic missions. The Tanganyika Government has lately instituted 'rural industries courses' at three of the largest of its primary schools; these courses are intended to produce 'handymen' who can use their skill for their own private purposes, rather than artisans working for hire.²

In the coastal regions of the West African colonies the traditional attitude to education, as something which should be not only mainly literary in content, but modelled as closely as possible on that given in England, is more strongly entrenched than in East Africa. The report of the Under Secretary of State for the Colonies on his visit to West Africa in 1926 remarks on the extent to which education there was dominated by the 'cult of the certificate'.³ This attitude, reflecting the spirit of the period when the

¹ *Uganda Protectorate, Annual Report of the Education Department, 1930*, p. 11.

² *Report to the League of Nations on Tanganyika Territory, 1937*, p. 124.

³ *Report by the Hon. W. G. A. Ormsby-Gore on his Visit to West Africa, Cmd. 2744, 1926*, p. 90.

educational system was first established and also the natives' own preferences, finds expression in the demand for English examination standards and for the widest possible use of English as the medium of instruction. In Southern Nigeria, with the exception of King's College at Lagos, which from its inception in 1909 provided a full secondary course up to the English School Certificate, and of some secondary work done in the large mission schools, the general education given up to 1929 was a primary course, culminating in an examination which qualified for junior government posts or commercial employment. Proposals made by the Director of Education in that year led later to the reorganization of the system by division into primary and middle schools, the latter giving training of various types, which includes workshop practice and agricultural instruction, closely connected with the teaching of biology. Farms are attached to the two government middle schools outside Lagos. Schools preparing for the new school-leaving examination must teach some kind of manual work, but the course is not intended to be vocational in the sense of training for specific occupations, as it is not felt that the demand for boys with a technical training is sufficient to justify government provision for it. In the Gold Coast the effect of modern conceptions of educational policy can be seen in the greater proportion of manual work done in the Northern Territories, where the schools are of more recent origin. Generally speaking, however, much of the teaching in the western coastal areas retains its original character. It is characteristic that a large mission school in the Gold Coast could in 1938 appeal for assistance in England on the ground that it performed a Greek play every year and 'rendered the odes in the original Greek'.¹

In addition to the vocational bias in general education there are schools which train their pupils for employment in specific occupations. Here again there is a confusing conflict of nomenclature, but it will be convenient to follow the broad division drawn by the East African Commission of 1937 between 'trade schools', training artisans, and 'technical schools', organized to produce foremen and similar grades.² An alternative differentiation, which may become clear as education develops, is that the trade schools

¹ *The Times*, May 31, 1938.

² *Report*, op. cit., Colonial 142, 1937, p. 63.

should take children from the primary schools and the technical schools should recruit their pupils from the secondary schools. The Commission suggests that trade schools should be controlled by the technical departments, but technical schools by the Education Department.

There are many examples of successful trade schools. In Basutoland, for instance, the Lerothodi School concentrates on iron and carpentry work. Pupils from Bechuanaland attend the Tigerkloof Industrial School, with financial assistance from government.

Training in carpentry, building, printing, in medical work and in other technical subjects or crafts is provided at many mission stations. Most mission hospitals train male and female assistants and the missions provide courses in midwifery at many stations.¹ In Northern Rhodesia a Government Trades School at Lusaka provides a four-year course in carpentry and building (fifty-four apprentices were in training in 1935), and the Barotse National School has twenty-two carpenters and five building apprentices in its industrial department; industrial training is also given at four mission schools. In Nyasaland valuable training in building and carpentry is given at the Livingstonia Mission at Kondowi and at the Church of Scotland Mission at Blantyre. Men trained at these institutions are to be found working throughout the Rhodesias and the Union of South Africa. The Veterinary, Posts and Telegraphs, Public Works, Printing, and Transport Departments of Nyasaland have courses for training in their own branches of work. In Kenya the Native Industrial Training Dépôt, a government institution, gives artisan training organized on the basis of a four-year course, which is intended to be taken on the completion of the primary course. The dépôt provides for instruction in carpentry, smithy work, bricklaying, masonry, painting, and tailoring. In Tanganyika the Bukoba Central School was converted in 1933 to an agricultural school giving special attention to coffee; it aims at the training of farmers rather than of agricultural instructors. Five of the primary schools have artisan classes, the course in some cases running to five years; the technical training for government service is given by the Printing, Railway, Post and Telegraph, Mines, Medical, and

¹ See Chap. XVII, p. 1187.

Sanitary Departments. In Uganda the government organizes special agricultural courses of different grades for adult natives at the two experimental stations, Bukalasa and Serere. In Sierra Leone there are two trade schools in the colony; the Sir Alfred Jones Technical School gives instruction in carpentry, and the agricultural school at Mabang gives a three-year course to boys who have reached the sixth or seventh standards in primary schools.

A number of examples may be mentioned of 'technical schools', or institutions approximating to that status. The Uganda Government technical schools at Kampala and Elgon, for instance, may be accounted as such. In Nigeria agricultural schools exist at Ibadan in the Southern and Samaru in the Northern Provinces. Pupils at Samaru are expected to have already passed through secondary schools. The course given at Ibadan follows two years' training at the Yaba Higher College,¹ and therefore may be assumed to fall within the category of 'higher education'. The Katsina College in Northern Nigeria has classes which give preliminary instruction to pupils proceeding to apprenticeship with the Medical Department, or to the Samaru agricultural station; arrangements have recently been made for the training of engineering assistants in co-operation with the Department of Public Works. In the Gold Coast the Prince of Wales College, Achimota, occupies a peculiar position in that it covers every stage of education from the infant school to the university: its work on the vocational side is described in a subsequent paragraph. There is a government institution for training in agriculture and forestry at Cadbury Hall, Kumasi. This conducts a three-year course; almost all the students who take it enter the Agricultural and Forestry Departments. Short courses varying from three months to one year are also given to young men wishing to take up farming.

Within the cadre of the public services, technical and specialist training is given, as has been shown, by Public Works, Forestry, Medical, Veterinary, and Survey Departments, also in the various government printing works and in government railway shops.

Some account of the 'Jeaues' system has already been given in

¹ See below, p. 1249.

connexion with Southern Rhodesia, and it is further dealt with in the subsequent section on the training of teachers.¹ The Nyasaland Jeanes school gives some training to selected chiefs and their wives, and it is suggested that courses for agricultural demonstrators, peasant farmers, cattle masters, and clerks for the native authorities should be instituted at the centre in Northern Rhodesia, together with special courses for different branches of government service and possibly for men required by the mines.

(g) *Higher Education*

For post-secondary education the High Commission Territories look naturally to Fort Hare;² provision is made at Makerere in Uganda, the Yaba Higher College near Lagos, Achimota in the Gold Coast, and Fourah Bay in Sierra Leone. These latter colleges were founded with the intention that students should ultimately be able to reach the standard required for an English university degree. Makerere College and its associated institutions³ are the only centre for advanced education in East Africa. In 1935, 1936, and 1937 numbers of its students obtained the Cambridge School Certificate, and some of them qualified for exemption from London Matriculation; but the standard of Makerere and its associated institutions is not to be measured by this alone, for the vocational courses already take their students far beyond the level of the British School Leaving Certificate. The number of students pursuing the general cultural course represented by preparation for the Cambridge Certificate is a small minority of the total; the rest are following the vocational courses which Makerere and its associated institutions provide in medicine, teacher training, engineering, agriculture, and veterinary work. Students trained in the pre-vocational science course at Makerere and at the Mulago Medical School⁴ become fully qualified medical aids, and 'are capable, under some supervision, of running small district stations and hospitals by themselves'.⁵ The East African Education Commission recommended that the existing post-secondary courses at Makerere and its associated institutions should be grouped to-

¹ See below, p. 1250.

² See above, p. 1218.

³ Mulago Medical School, Kawanda Agricultural School, and Old Entebbe Veterinary School.

⁴ See Chap. XVII, pp. 1183-5.

⁵ *Report*, op. cit., Colonial 142, 1937, p. 97.

gether to form a Higher College of East Africa. The Government of the United Kingdom have indicated their intention of asking Parliament for a grant of £100,000 towards the cost of this proposal.¹ Tanganyika is also prepared to grant £100,000 towards it and Uganda up to £250,000. It is hoped that, as the standard of the secondary schools improves, the School Leaving Examination (or a local equivalent) will become the entrance to the proposed Higher College in Uganda, which will then develop its university studies, including courses for the London degree.

The courses now given at the Yaba Higher College originally started in 1932, in connexion with King's College. In 1934 the present college moved into its own buildings at Yaba. The courses at present offered are medical, agricultural, engineering, surveying, and teacher training. The college aims at ultimate university status, and although at present there is no arts course, it gives a course for teachers in history, literature, and Latin. The medical course, conducted in connexion with the adjoining Government Medical School, is of importance;² it aims at giving a training which will fit Africans for employment as medical assistants. As a general policy, numbers in the vocational courses at Yaba are limited to those for whom employment is likely to be available.

While Makerere and Yaba have thus the appearance of institutions framed to supply certain defined needs of the administrative and teaching bodies, Achimota is the concrete expression of the faith of coastal West Africa in higher education of a type which more closely resembles that of the older English universities. It was built at an impressive cost; begun in 1925, it was completed in 1931 at an outlay of £617,000; the annual grant for its maintenance, at first £68,000, was later reduced to £48,000. Financed almost entirely by government, it is controlled by a council of fifteen members, of which six must be Africans. The Christian religion forms a voluntary but an integral part of its teaching. Its aim has been described as the production of a type of student who is Western in his intellectual attitude towards life, but who remains African in sympathy. It seeks accordingly to preserve and develop what is deserving of respect in tribal life, and its founders hoped

¹ *The Higher College of East Africa, Proceedings of the Inter-territorial Conference, 1938*, p. 9.

² See Chap. XVII, p. 1184.

that in this respect it would afford a model for all education in the colony, and would indicate the standard which it should attain. It was with that end in view that it was decided that the college should provide a complete course of education from the kindergarten to the university degree; and it has, therefore, only in part the character of a university institution. It already offers arts and science courses covering the syllabus for the London Intermediate Examination, and provides the full course of the London B.Sc. in Civil Engineering. In 1935 there were seventeen students taking university courses. Though its avowed aim is not vocational, the subjects taught in the advanced classes include agriculture and a preliminary medical course. All pupils receive manual training in the form of 'arts and crafts' lessons and of 'hobbies' chosen by themselves. Schemes of village improvement are worked out and put into practice by parties of students in neighbouring villages, and a special agricultural course leading up to the establishment of the student in a model holding is now under consideration.

There remains to be mentioned the Fourah Bay College in Sierra Leone, which was the only institution for higher education in West Africa until the foundation of Achimota. It has given university courses in arts and theology for at least fifty years, and some of its graduates occupy prominent positions in the professions on the West African coast. It is a small institution maintained entirely by mission funds, and is affiliated to Durham University. In 1935 it had seventeen students, mainly in theology.

(h) Teacher Training

Facilities for the training of teachers are developing, but much remains to be done, and at present perhaps a majority of the teachers in primary schools have had not more than a primary education themselves and are inadequately trained. In most territories a government examination for a teacher-training certificate is imposed, and the standard of the tests is raised as training improves.

In Northern Rhodesia teachers are trained at twelve mission centres, and at the Jeanes School at Mazabuka;¹ eighty-three

¹ See below, p. 1252.

elementary teachers passed out from the schools in 1936. In Nyasaland teacher training is given in thirteen mission 'normal' schools and at the Jeanes School. In Tanganyika licences to teach have been issued to 1,496 Africans; in 1937 the department had registered 123 in Grade I, and 1,117 in Grade II, with 32 women. Training is given by various missions, but the adequate supply of well-trained teachers for the native administration schools presents a yearly problem; a special course has been opened at the Mpwapa Government School, but it can in the next three years produce only 50 teachers out of the 150 for whom requests have been made. The training of teachers in Kenya is exceptionally backward, and the system of giving instruction in teaching to students while still in primary schools is admittedly unsatisfactory. It is now proposed to form special mission training schools.

Teacher training in Uganda is more advanced than elsewhere in East Africa; in 1936, 316 men and 197 women teachers were in training at one government and thirteen mission schools. In many of these centres the educational qualifications of the teachers on entrance to the course are inadequate, the classes are said to be too large, and there is a lack of practising facilities. The government centre at Makerere aims at the higher training of schoolmasters for government service and for the missions, and serves as a model training school for the mission centres. Nigeria has a more developed system than the East African territories. There are four government training centres in the Southern Provinces, mainly for teachers in native administration schools, and training courses are also given at the Yaba Higher College. In the Northern Provinces there is a centre at Kaduna. In the Gold Coast, Achimota trains teachers for government schools and for missions which have no training facilities, and there are three mission training centres; the course of training covers a period of four years. In Sierra Leone, Fourah Bay College trains teachers for a government teacher's certificate. In the Protectorate a mission institution provides a course designed to train teachers as well as evangelists.

The training of women teachers in all the territories remains to a great extent in the hands of the missions, and training is usually on the lines of the pupil teacher system. In Kenya it is said that

there are no facilities for training women teachers, partly owing to lack of girls with sufficient education. However, in Uganda, where the education of girls is more advanced than elsewhere in East Africa, six normal schools train Grade A women teachers, and at nine centres courses are provided for vernacular teachers for elementary schools.

The East African Education Commission recommended¹ the development of government training on the ground that the native administrations are unable to depend entirely on mission centres for their teachers, and because the missions alone cannot hope to train teachers in the numbers which are needed. The Commission also urged that the standard of certification should be raised,² and that no grant should be given to missions for teachers' salaries except where a definite standard is reached. They also suggested an extension of the existing systems of refresher courses. They have pointed out, however, that the formation of a cadre of efficient native teachers depends not only on training facilities, but on salary scales. At present a cook boy can earn 30s. a month, and a third-class constable 36s., while Grade A teachers in primary schools start at only 25s. a month, and Grade C teachers have no incremental scale, and receive on an average 8s.;³ thus the teaching profession is often looked upon as a stepping-stone to better paid employment, and the wastage caused by trained men who leave after only a short period of teaching is considerable.

As an outcome of the Phelps-Stokes Commission⁴ and through grants given by the Carnegie Corporation, a Jeanes school, the first of its kind in Africa, was started at Kabete in Kenya, in 1925, on the lines already described in connexion with Domboshawa;⁵ another was established at Mazabuka in Northern Rhodesia, and another near Zomba in Nyasaland. It has already been mentioned that the scope of these schools is being considerably widened. In many quarters the work of these teachers has been held to be of very great value; in some others it has been felt that results have not come up to expectation. The difficulties in training men whose previous schooling was often inadequate are obvious, and

¹ *Report*, op. cit., Colonial 142, 1937, pp. 46, 49.

² *Ibid.*, p. 45.

⁴ *Education in Africa* (ed. T. Jesse Jones), 1922.

⁵ See above, p. 1228.

³ *Ibid.*

the deliberate encouragement of such men to become 'leaders' is said to give them a feeling of superiority and a preoccupation with their salaries and status which reacts unfavourably on their work. In the case of the mission-employed Jeanes teachers there is also a tendency for their loyalties to be divided between their employers and the government which controls them through post-training supervision. A full account of the movement is contained in the Report of the Inter-territorial Jeanes Conference held at Salisbury, Southern Rhodesia, in 1935.¹

(i) *The Dependence on External Examination Standards*

When African schools, conducted by missions and governments, felt it necessary to enter their pupils for external examinations, they followed the obvious course of asking the examining bodies which set examinations for schools in England to extend their work to Africa. Two important factors accelerated this process; Africans attached the greatest importance to tests which carried an English hall-mark; and almost all professional qualifications to which an African might aspire could only be obtained by candidates who had passed a British school leaving examination or university matriculation.

This development imposed upon African secondary schools a curriculum which, devised for English children, was unsuitable. In the primary schools, teachers, preparing their best pupils for secondary work, adapted their syllabuses to the needs of the external examination, and in doing so imposed the influence of that examination upon numbers of African children who would never pass beyond the primary stage of education. These effects are now well realized and in most of the dependencies efforts are being made to counteract them; but in some of the coastal areas of West Africa the change is delayed by the opposition of Africans to any step which appears to deprive them of gaining the hall-mark which a pass in an external examination is held to convey.

The English examining bodies, of which four are concerned, have been helpful in the matter. At the invitation of the Colonial Office they have formed a Joint Advisory Board for School Examinations in the Colonies and Dependencies. Through this

¹ *Village Education in Africa*, 1936.

Board an agreement has been reached which rules out undesirable competition between the examining bodies. The Cambridge School Examinations Syndicate and London University have taken local circumstances into account in adapting their requirements to African needs. For instance, in the Gold Coast, agricultural science and four African vernaculars may be taken as subjects in the school leaving examination. Special botany papers are set, mentioning only local plants. At Achimota the practical subjects for the London degree in engineering are tested by local examiners under local conditions.

At the same time something has been done in East Africa to provide examinations locally. For instance, the Joint East African Examining Board in Medicine conducts examinations in pre-vocational science (approximately of school-leaving standard) and in more advanced subjects.¹ The East African Education Commission² recommended that an East African School Leaving Certificate should be instituted and granted by a joint board representing the Education Departments of the four East African dependencies.

It is obvious that adjustments of the external examination, such as those referred to above, cannot have more than a partial value. So long as the external examination is allowed to be the end towards which secondary education works, it must tend to influence the whole outlook of African education. It will have another effect, the bearing of which may become more important in the future than it is to-day.³ It will make it increasingly difficult to consider the use of any of the African languages as a medium of secondary or advanced teaching. In the present state of African education, however, it must be admitted that the external examination has a definite function; it serves both to check the standard of the local tests, lest they stagnate or fall, and lose the respect of Africans and Europeans alike, and to provide an avenue for Africans to enter certain professions which otherwise would be closed to them. Viewed in this light, it follows that the local examinations should be those normally taken, and that the oversea examinations should be confined to a small class of selected students.

¹ Chap. XVII, p. 1185.

² *Report*, op. cit., Colonial 142, 1937, p. 60.

³ See below, p. 1257.

(j) Education of Women and Girls

The general policy for the education of women and the facilities for training women teachers have been mentioned above. Prejudice and social custom, also the lack of women teachers, present difficulties; but that a desire exists among many classes of Africans for the education of their women cannot be called in doubt.¹ Educated men feel the need for wives who can help them in the leading positions they hold in native society. In the case of teachers, an attempt to meet this need is made by the provision of special training for wives at the Jeanes schools and at many mission stations. The share women take in almost every activity of tribal life, and their great influence in agricultural as well as home matters, emphasize the need and importance of adequate schooling for girls.² Again, the large numbers of women and girls who now live in urban areas, in mine compounds, or on the properties of the European employers of their husbands or fathers, divorced from the daily routine of village and tribal life, would seem to create an educational problem calling for special attention.

An examination of the educational figures shows that throughout most of British Africa the education of girls has lagged behind that of boys. Exceptions to this generalization can be found in Basutoland and Bechuanaland, where, owing to the long absence of the young boys herding cattle, the number of girls in school is twice that of boys. The salient characteristics of the present position elsewhere in British territory may be briefly summarized, but here again it is necessary to emphasize the considerable amount of work done on mission stations apart from officially recognized or state-aided schools. There are few stations where some girls or women are not receiving a valuable if limited training in the domestic sciences or in the care of children, in nursing and midwifery, or as teachers.

In Northern Rhodesia the number of boys and girls attending school is almost equal; the great majority of the girls, however, attend sporadically at 'ungraded' schools, where they receive little serious education. There are some twelve boarding-schools managed by missionary societies; one of these, the Mbereshi

¹ *Report*, op. cit., Colonial 142, 1937, p. 66.

² M. C. Blacklock, op. cit., pp. 232 ff.

School of the London Missionary Society, trains girls as nurses, and a Jeanes school for girls gives an education which prepares for marriage and motherhood. This school is subsidized by the Carnegie Corporation and the government. In Nyasaland the average attendance of girls in schools going beyond the elementary vernacular stage in 1935 was 639; the enrolment at teacher-training institutes was eighty-seven and in medical classes seven. In Tanganyika fourteen mission schools for girls receive assistance from government. The first government girls' schools were opened in 1929: there are now three, but there is a considerable number of co-educational primary schools. In 1937 the pupils in government or recognized schools numbered 2,999. The government is about to appoint a woman officer as supervisor of the education of women and girls. Kenya in 1935 had 29,011 girls in elementary and 399 in primary schools. In Uganda, King's College at Budo provides an experiment in co-education, though there are only 22 girls among 300 pupils.

In Southern Nigeria there are one government and twenty-five assisted girls' schools. The government school, Queen's College, Lagos, is a secondary school. Three girls obtained the School Certificate in 1934, and earlier pupils have done well. One girl passed into the University of Dublin and is taking a medical course there. A few mixed schools provide courses in domestic subjects for girls; a 'housecraft certificate' is offered for older girls. In addition a number of missions manage 'marriage-training homes'. In Northern Nigeria it was not till 1929 that the Moslem prejudice against the education of girls could be overcome. There are now five girls' schools with an increasing number of pupils. In the Gold Coast there are three government and eleven assisted girls' primary schools, and twenty mixed schools teach domestic science. The only girls' secondary school is Achimota: here two Gold Coast girls for the first time obtained the Cambridge School Certificate in 1934. A few African girls are now entering higher educational institutes, and are qualifying for university degrees and diplomas.

(k) *The Education of Chiefs*

The attempt to secure an educated class of native rulers led to the establishment in British territories of three schools originally

intended for chiefs' sons, at Georgetown in the Gambia, Bo in Sierra Leone, and Tabora in Tanganyika. The Bo school was founded in 1906 and at one time had representatives of eighty-seven chiefdoms on its rolls. The eight-year course was mainly literary, but gave some attention to agriculture. Tabora at one time attracted much attention as an experiment in education on tribal lines; the pupils lived in boarding-houses grouped according to the areas from which they came. A similar organization was introduced at other 'central' schools in Tanganyika, notably Malangali, but has now been abandoned. With the general spread of education it has been considered unnecessary to reserve special institutions for the families of chiefs, who now receive their education in the ordinary schools. Some doubts have, indeed, been felt whether it is really within the spirit of native institutions to do anything which would mark the chiefs out as a separate class. The course for native authorities at the Jeanes school in Nyasaland represents a more modern attempt to deal with the problem of training chiefs in their new duties. In general, however, it is now left to solve itself through the increasing demand for education and the prestige of the educated. As will be seen, the French¹ and Belgian² systems both make special provision for chiefs' schools; that the British authorities have ceased to maintain such schools is due not to any lack of appreciation of the value of education for chiefs, but to a different conception of the functions which chiefs have to discharge and the position which they occupy in their own society.

(1) The Language of Instruction

The language to be used as a medium of instruction, and the stage at which the teaching of English, or of a useful and widely spoken language such as Swahili, can be introduced, present complex problems. The diversity of native languages is considerable and large language groups are the exception rather than the rule. The measures taken to meet this difficulty have been described.³ An important factor is the desire of Africans themselves to learn English, which in many cases is the incentive to seek education.

¹ See below, p. 1266.

² See below, p. 1277.

³ See Chap. III, p. 98.

A knowledge of English is of commercial value, for at the mines, the trading stores, and on European estates the English-speaking native can often command a better position and a higher wage. Again, there is the natural desire of the African to learn a language which is that of his rulers; the scarcity of general literature in the vernaculars is not without its influence in this direction among a people to whom reading is a new-found pleasure.¹ The weight of native opinion has sometimes led schools to attempt the teaching of English in early standards through inadequately equipped teachers, a system that leads to discouragement. The general practice now follows that indicated in the memorandum of the Colonial Office Advisory Committee² and a native language is used in the elementary stages, but there is still considerable difference of opinion as to the point at which English as a subject or a medium should be introduced.

In Nyasaland the vernacular is the medium of instruction during the first four years in primary schools. English is then introduced as a subject in lower, middle, or central schools for three years and becomes the medium of instruction in upper, middle, or station schools. In Kenya, Tanganyika, and Uganda the use of Swahili as a convenient language in place of the local vernacular is common. In this connexion the policy put forward by the Director of Education in Uganda is important, and indicates a tendency in Uganda to replace Swahili by the vernacular or even English. The Director advocates the use of the vernacular as a medium of instruction during the first four years and the introduction of English as a subject in Class IV, the emphasis on the vernacular decreasing until English becomes the medium; Swahili should be permissive and introduced only if desired as a subject in Class III. This is in effect the practice obtaining in Buganda and Busoga, and it is suggested that it should be extended to some other linguistic groups. In Kenya, Swahili is introduced as a medium of instruction at the third or fourth standard between the vernacular and English, as a solution of the difficulty of providing instruction in a vernacular to pupils of mixed tribes speaking different languages in schools which are

¹ See below, pp. 1294-6.

² *The Place of the Vernacular*, op. cit., African 1110, 1927, p. 8. See p. 1230, above.

not advanced enough or equipped with staff qualified to use English as a medium. In the native administration schools of Tanganyika, Swahili is the medium and English is not taught; in the government and mission primary schools, however, Swahili is the medium for the first four years only, after which English becomes the medium. In Northern Nigeria English is the medium at the 'middle' or secondary stage. For pupils whose primary education has been entirely in the vernacular, a preliminary year is devoted to the intensive study of English. In the Gold Coast English becomes the medium after Standard III. Although it is generally recognized that the introduction of a second native language as a medium, or the usage of a lingua franca instead of the local language is far from ideal, and also that it is important not to alienate the native from his mother tongue, the difficulties of providing teachers and text-books in the vernaculars and of instruction to mixed classes are in some areas insuperable.

(m) *European and Indian Education*

The West African territories do not have to make provision for European education. In all other areas, including the High Commission Territories, there are European schools, though only in Kenya and Northern Rhodesia are they on any considerable scale. The changes following the report of the Education Commissioner¹ in 1936 are bound to reflect on the Northern Rhodesia system of European education, which is closely connected with that of Southern Rhodesia.² At the age of 12 years and 15 years Northern Rhodesia children may take public examinations entitling them to scholarships and bursaries financed by the Beit Trustees. The latter examination leads to a further three-year course at a Southern Rhodesia secondary school. Northern Rhodesia schools at present provide two years of a secondary course. There is no provision for technical education, but the Technical School in Bulawayo can probably serve both countries efficiently for some time to come. In the north, as in the south, academic secondary education is also said to be unsuited to the majority of children, but there is a demand by the European population in the north for further provision for secondary and technical education, though there is much to be

¹ C.S.R. 25, 1936.

² See above, p. 1224.

said against it.¹ The attendance at European schools in Nyasaland has diminished rapidly since 1935, when Southern Rhodesia abolished all tuition fees, and extended this privilege to children from Nyasaland. There are in Tanganyika government-aided schools giving elementary teaching in English, German, and Greek. For secondary education the pupils have to go to Kenya, which admits children from all the East African territories into its secondary schools.

Schools for Asiatics are maintained in Kenya, Uganda, and Tanganyika, as has been explained in Chapter VIII.

V. THE FRENCH TERRITORIES

(a) *Evolution and Character of French Colonial Education*

At the outset French policy was limited to the grant of assistance to missionary effort. The earliest instructions, issued from the Colonial Ministry in 1816, justified the encouragement of Christianity on the ground that its moral basis would make for progress in civilization. In spite of the resistance which this policy encountered from Moslems in Senegal, it regulated educational effort for forty years, and the government showed its own interest by founding a college at St. Louis for the training of priests. The progress made was slow, and by 1854 there were only four schools, situated in the old settlements of Gorée and St. Louis, with a total number of 600 students. The more vigorous policy of Faidherbe, in which internal development was combined with external expansion, effected a change. In 1857 he founded the first lay school, and Galliéni subsequently opened a similar school in each of the towns which he occupied in the French Sudan. But even under the new policy the advance made was not substantial; there were in 1900 only seventy schools in French West Africa, with an enrolment of 2,500 pupils, while the only schools in the Ivory Coast and French Guinea were those still carried on by the missions. In part this was due to the preoccupation of the government in the pacification of the Sudan and Senegal, but in the main the reason must be sought in the fact that France had not yet clearly envisaged

¹ See *Report of the Commission on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, p. 277.

the education of the African as an active factor in producing that approach to French civilization which is the objective of modern French policy. To-day British observers of the French system of education in Africa cannot fail to be struck both by its distinctive conception of the political function of education and by the systematic character of the steps taken to give effect to that conception. Education has a definite place as a factor in the policy of association.¹

While in British territories more attention has, until recent years at least, been devoted to the expansion of education, there have always been differences of opinion as to its objective; nor could it be said that the assumption by the State of responsibility for its control has yet resulted in any such precision in its objective or its methods as has followed from the decision of the French to define its place in their political system. In their colonies the principles are laid down by the Colonial Ministry, in close touch with the Ministry of Education, and their execution is ensured through the ministerial inspectorate. Although a good deal of latitude is allowed to the local governments in administration, the system of education has the uniformity of a centralized organization, and affords an illustration of that logic of method which has led one of their own authors to describe the French as the 'drawing masters of Europe'.

(b) *French West Africa*

The points of contrast will appear more clearly from a study of the system as now in operation in French West Africa. The organization first set up by the local *arrêtés* of 1903 was revised in 1918, but in its present form it is based on the general orders contained in the circular of the Governor-General of May 1, 1924. The State assumes the major responsibility for education, and while subsidies are granted to missions the part which their schools play in the system has little influence on its development; out of a total of 62,300 primary pupils in 1935 there were only 9,458 in non-state schools. While the French Government was a party to the Treaty of St. Germain of 1919, which guaranteed freedom of conscience and the right of missionaries to pursue their calling, it stipulated

¹ See Chap. IX, p. 484.

in a decree issued in February 1922 that no private school should be opened without authorization, that authorized schools must undertake to follow the courses prescribed by the state, that education must be given exclusively in French, and that European mission teachers must have the same certificates as government teachers. Some latitude is observed in practice in applying this decree; but the state is prepared to support the mission school only in so far as it affords instruction in the French language and develops sentiments of loyalty to France. The education given in the state schools is entirely secular. There are two parallel systems, the European and the African. In the former the curriculum is identical with that given in the schools of France, so that a child can at any time transfer from one to the other, and a pupil who has completed the course provided in Africa is qualified for entry to French universities or technical institutions. In the latter the programme is intended to be a training for life in Africa. The dual system, however, does not correspond to a colour bar, nor to a classification of school children on a basis of colour. French-speaking African children attend the French schools, and in Algiers, where the organization is similar, the children of poor French families go to the African schools. It is not easy to exaggerate the effect on native outlook of a system which permits Africans to sit side by side with French children and to compete with them on equal terms in school examinations.

It is, however, to the African schools that chief interest attaches for the purpose of the present survey. Educational policy is marked by two outstanding features: first, the universal use of French as the medium of instruction; secondly, a clearly defined policy of limiting more advanced education to the demand which exists for its products, with a strong emphasis on vocational training as the form which such education should take. The use of French as a medium of instruction from the earliest stages is supported on the ground that if mastery of a European language is the ultimate aim, it is better to start it as early as possible. The pupil is instructed by the 'word method', that is, by associating the appearance of the whole word with its pronunciation and meaning, rather than by trying to read or write it syllable by syllable. Given the objective, the French method certainly

appears to be successful in imparting a knowledge of the language and an ease in using it which is remarkable even in the early stages of study. As for the second point, the policy of maintaining a relation between the demand and supply in the higher branches of education is not merely a doctrine of expediency, nor is it entirely due to a desire to avoid the creation of that large and discontented class of educated unemployed to which many point as the first-fruits of the educational policy of India. It is founded on the belief that the fuller association of the native population in the development of a territory can best be realized through the employment in the administrative service of those whose intelligence qualifies them to share in spreading the work of civilization. The first object of advanced education is, therefore, to train the specialist cadres needed for this purpose. Education accordingly assumes a dual function; this has been summed up in the well-known phrase of a former Governor-General, M. Carde, '*instruire la masse et dégager l'élite*'.¹

Thus the French policy aims at providing for the majority of the school population an elementary education complete in itself, and limits the number who proceed to more advanced courses; entry to secondary and higher institutions is gained by competition, and the numbers turned out are restricted to estimated needs. In this way the domination of the school system by the most advanced institutions, characteristic of some British territories, is to a large measure prevented. It is further characteristic that state education is throughout free. Even in the boarding-schools all charges are met by the state, which gives a small sum as pocket-money; all students are taught to consider themselves as stipendiaries of the state. The 'popular' schools, as those designed for the masses are called, are of three grades—'initiation' or preparatory, elementary, and lower primary. Schools of the first grade are to be found in most villages of any importance, and teachers even accompany groups of nomad herdsmen. These schools give a course of two years, concentrating almost entirely on spoken French. There is an elementary school in every town and at nearly every government station. In the rural areas the teaching given concentrates on the improvement of local conditions;

¹ See Chap. IX, p. 484.

in addition to instruction in agriculture and animal husbandry, attention has been given to the development of local pursuits special to certain districts, such as metal-working in the Siguiiri gold area, and fishing on the coast. In 1935 there were 273 village and 19 urban schools of this type with 29,294 pupils.

The primary stage is represented by the regional schools, the majority of which have European headmasters. Much of the success of the French system depends on the work of these masters. They belong to a different class from the officers in the British educational service, and live on terms which bring them into closer touch with Africans; all observers agree in recognizing the enthusiasm and professional skill which they bring to their task. Seventy-eight regional schools, attended by 23,312 pupils in 1935, give a further two years' education, carrying history, geography, hygiene, and arithmetic beyond the point reached in the elementary school, and combining them with training in farming and carpentry of the kind adapted to village life. In the towns, at the corresponding stage, urban primary schools give a course which is almost entirely literary, since their pupils may expect to find employment in clerical work. For the two normal schools which train teachers for rural work sites have been chosen in the Sudan and the Ivory Coast as representing the two typical climates of French West Africa. Urban teachers are trained at the William Ponty School at Dakar. The 'popular' course is complete with the primary school. In addition, however, there are in the larger centres, craft schools, taking pupils of any age, whose aim is to improve the technique of indigenous crafts; trade schools which are open to any one with elementary education and to trained mechanics, masons, chauffeurs, &c.; and adult courses concerned mainly with agriculture and hygiene, which are given in the vernacular. In 1935 about 200 such courses were organized and attended by 8,400 natives.

The Mission Schools. Though the French educational system does not depend, as has already been shown, upon mission activity, there are a number of schools managed by missions. Many of these are 'bush' schools, where the teaching is mainly confined to oral and religious teaching in the vernacular, but there are also some which teach up to the primary standard in the European system, such as the White Fathers' primary school in Dakar. In Togoland,

where the provisions of the mandate require that freedom of access be granted to all missionaries who are nationals of states members of the League, mission activity is proportionately greater; in 1937 there were fifty-one government schools with 5,044 pupils and thirty-eight aided mission schools with 4,974 pupils. Subsidies to missions amounted to 8.5 per cent. of the total education expenditure. Only missions which teach French are eligible for the subsidy, which is based on the amount expended on teachers' salaries; but teachers need not have French qualifications, and may use the vernacular as the medium.

Education of Girls. In the Sudan and Senegal there is a certain number of schools for girls, and one in the Ivory Coast at Grand Bassam; there is also a large number of mixed schools. At Bamako and Ouagadougou there are orphanages for half-caste girls, the state regarding the education of the *métis* class as a special responsibility. In the regional schools the training of girls in household management is being developed. The total number of girls receiving education is, however, small; in 1935 there were 2,060 in village schools and 2,309 in regional schools. There were twenty-one girls at the *Lycée Faïdherbe* and 141 at the Dakar Secondary School, fifteen in the midwifery and five in the district nursing section of the Dakar Medical School.

The Chiefs' Schools. There are now four schools for the education of chiefs' families. The chief, as is shown elsewhere,¹ is in the French system regarded essentially as an agent of the administration, and it is considered necessary both to give him the administrative training appropriate to this position and to ensure, by his education in a special school, that he ranks in the class of the *élite*. In founding the first chiefs' school at St. Louis in 1856 Faïdherbe stated² that it was designed to form 'quelques indigènes d'élite pour nous aider dans notre œuvre de civilisation'. Closed for a time, it was revived, and in 1908 became an advanced Moslem school, but not confined to chiefs; it returned to its former status in 1922, entrance being limited to members of the families of Moslem chiefs. Since then three other schools have been added; in their four years' course, in which, though Arabic and Koranic law are taught as subjects, French is used throughout as the

¹ See Chap. IX, p. 486.

² *Le Sénégal*, 1889, p. 366.

medium, chief stress is laid on the study of administrative methods, including the local law and judicial system, book-keeping, and correspondence. Of late years some agriculture has been added.¹

The Post-Primary Stage. All education beyond the primary stage has in view the supply of such numbers of specialists as are needed in vocational employ. French West Africa repeats here the educational history of Madagascar. As early as 1897 Galliéni broke with the traditional literary methods, claiming that in the absence of express provision for vocational training the policy of associating natives in administration would be impracticable. In Morocco the policy of vocational education arrived later; but it is noticeable that primary education is there characterized as 'pre-apprenticeship', since it is designed to fit natives for industrial occupation in the towns and farming in the villages, while in the 'schools for the sons of the notables' there is provided a special type of education for the small class which is treated as having a vocation in local leadership. The product of vocational training is now characterized in French West Africa as the *élite*, the '*cadres* who are to help us in our work of colonization'.² These cadres are formed from among the best pupils in the regional schools. Selected pupils follow a course of three years in one of the eight higher primary schools established at the centres of the eight divisions³ of the federation. These schools give a general literary education. The most successful pupils then follow a course lasting one year to prepare them for entrance to high schools. In the high schools they are prepared for the lower grades of government or clerical employment, or for entrance to the *grandes écoles*, that is to the Medical School at Dakar,⁴ the School of Administration and Teaching at Gorée-Dakar, the Veterinary School at Bamako, or the schools for training rural teachers (*écoles de pédagogie rurale*) in the Sudan and the Ivory Coast. It is also proposed to form a higher technical school. All these schools are designed to train a superior class of assistant to the European government officials. In some of the colonies the higher primary schools have a vocational side with a *section de bois* and a *section de fer*, but these give a training leading

¹ For chiefs' schools in the Cameroons, see below, p. 1270.

² J. Brévié, quoted by W. B. Mumford and G. St. J. Orde Browne, in *Africans Learn to be French*, 1937, p. 90.

³ See Chap. VI, p. 189.

⁴ See Chap. XVII, p. 1185.

to minor posts in the Public Works, Postal, Railway, and other Government Departments.

The instruction given throughout all these schools is adapted to local conditions and is apart from the metropolitan educational system. On the other hand, two secondary schools, the *Lycée Faidherbe* at St. Louis and the secondary school at Dakar, a private school which was taken over by the state in 1925, are schools on a European model, and since 1924 give a leaving certificate which corresponds to the French *baccalauréat*. Scholarship pupils pass to these two schools from the high schools. A school of marine engineering also takes pupils from the high schools and gives a four-year training for naval service, including a knowledge of electricity which can be turned to account when the apprentice leaves the navy. The Medical School at Dakar, which is described elsewhere,¹ represents the most prominent educational achievement of the federation.

The system current in the mandated Togo follows in the main that of West Africa. The primary stage is completed in the regional schools which, as shown in a previous paragraph, are divided between the state and the missions; there are also a number of *écoles ménagères* for girls. In all, some 1,422 girls receive teaching of various types. Provision is made for post-primary teaching by two superior schools, opened in 1937 in Lomé and Atakpamé, both with a strong vocational bias. There is also a Togo section provided in the Victor Ballot School at Dahomey and in the Agricultural School at Porto Novo. In 1937 a series of *cours populaires du soir* were instituted on the model adopted in French West Africa.

(c) *French Equatorial Africa and Cameroons*

In French Equatorial Africa development is behind that of French West Africa. It has not yet reached the point where the dual system is necessary, and only the African course, up to the higher primary stage, is provided. There is an artisan school at Fort Lamy, and technical training is given by apprenticeship with the Public Works Department. It was decided in 1934, as a measure of economy, to send pupils to the technical and professional schools

¹ See Chap. XVII, p. 1185.

of French West Africa, rather than undertake the creation of parallel institutions for the French Congo. Only one regional school has a European teacher, but in some village schools in the military subdivisions French warrant officers are employed as instructors. In 1935 there were seventeen urban primary schools with European teachers. A school for the training of agricultural demonstrators was opened at the experimental station in Brazzaville in 1936. The attitude of government towards mission work has differed from that in French West Africa. Before the Treaty of St. Germain was ratified, local *arrêtés* laid down that only an association incorporated in France might open a school, and no school was authorized unless teaching was given in French; a circular of February 1921 emphasized the fact that the administration would enter into no relations with bodies whose constitution did not afford a guarantee of the absolute preponderance of French influence in a French country. The subsequent Decree of April 1921 conveying the ratification of the St. Germain treaty did not in terms modify the restrictions placed by previous *arrêtés* on educational institutions. In practice, however, their application has been relaxed, and there appears to be an understanding that non-state schools maintain their existence subject to the goodwill of the administration. Mission schools are subsidized, but may not teach any subject other than religion in the vernacular, and to qualify for recognition must have French taught by a teacher with a local diploma. In 1935 there were ninety state and ninety-eight mission primary schools. The total attendance at schools of all kinds was 15,877.

In the French Cameroons education is more fully developed. There are one advanced and three technical schools, one of which trains specifically for employment in the railway service and on public works, and two domestic training schools, attended in 1934 by 110 girls. There are also two mission technical schools. The higher primary school in its third year gives specialized training for clerks, postal officials, and candidates for the Medical School at Ayos, which was founded in 1933. In the mandated area mission teaching may be given in the vernacular, but only schools using French can qualify for government recognition. In 1935 there were sixty government village schools with 5,904 pupils: the

recognized mission schools had 6,610 and the unrecognized 81,758 pupils. These last are largely catechetical. Subsidies are paid on the basis of the qualifications of teachers and there is also a bonus on examination results; Catholic missions received 15,300 francs in subsidy and Protestant missions 60,600 francs. The education of chiefs follows a somewhat different course from that adopted in French West Africa.¹ There is a small establishment at Garoua for the sons of Moslem chiefs, where instruction is given by representatives nominated by the chiefs. Elsewhere the fact is recognized that chiefs have not the same social position as in the north. At Yaoundé a special class is reserved for about forty-five pupils of this type in the regional school; at Dschang and elsewhere about 252 members of chiefs' families attend the ordinary schools, but the *arrêté* of December 27, 1933, contemplates that when they have reached a suitable stage of instruction special courses will be opened for them.

VI. THE BELGIAN TERRITORIES

(a) *The Belgian Congo: the Place Assigned to Religious Bodies*

The Belgian Government has relied to a greater extent than the British upon the work of religious bodies in native education; and not only is the close contact between the state and these bodies a striking feature of the administration, but the nature of its relations with the Catholic and Protestant bodies respectively has had some significance in the political history of the Congo. The work of Christian missions had received particular consideration in the Berlin Act of 1885, which agreed that they should be accorded special protection. But the early entry of members of the French orders caused Leopold II to fear a growth of French influence, and by agreement with the Vatican the Belgian missionaries of Scheut were substituted for them. The Baptist Missionary Society under the leadership of George Grenfell and other Protestant missionaries had preceded the Catholics by some years, and had established a chain of missions along the Congo river; but the Concordat which Leopold II concluded in 1906 with the Vatican established the Catholic missions in a position of almost exclusive influence.

The Free State offered perpetual grants of land to Catholic mis-

¹ See above, p. 1266.

sions established in the Congo, and agreed to subsidize not only their scientific and educational activity but also their religious work. In the movement against the old Free State régime the Protestant missions incurred the charge of supporting English and American interests against those of the Free State, which had found some of its apologists among prominent Catholics. Under the Belgian Government suspicions of this nature have ceased to exist, but the administration continues to exhibit a preference for the Catholic bodies as agents in education. The missions are still divided officially into 'national' and 'foreign', of which the former in 1936 had 951 European and 53 African priests, 506 European and 94 African lay-brothers, 1,216 European and 114 African sisters, and 1,601,144 followers, while the latter had 893 workers and 238,807 followers. Since the 'national' missions are predominantly Catholic this gives a rough approximation of the proportion of Catholics and Protestants respectively. No mission school in the Congo is obliged to submit to inspection unless it wishes to receive a subsidy; but no subsidy can be given to a body which is not recognized as 'national'. The Protestant missions can with difficulty secure this recognition, of which the principal condition is that two-thirds of the administering body must be Belgian;¹ the British Roman Catholic missions seem to have encountered less difficulty.

The result has been that the 'foreign' schools, which in 1935 had 253,841 pupils, against 213,463 in those of the 'national' missions, are maintained almost without assistance from the state. Again, even in the few state schools, the management is almost universally entrusted to religious bodies, which are without exception Catholic. The Treaty of St. Germain and the *Charte Coloniale*² itself guarantee complete religious liberty in the Congo; but in so far as educational activity is concerned, the foreign Protestant mission is placed at some real disadvantage, under a system in which Catholicism, though not formally recognized as a state religion, enjoys so predominant an influence with the administration. The work at some of the Protestant institutions is, however, recognized by the authorities as being of a high order.

The Belgian Government, in making so wide a use of religious bodies in the management of its schools, bases itself on a view of the

¹ Decree of July 19, 1926.

² See Chap. VI, p. 206.

place of religion in education which has many points of resemblance to that embodied in the British Colonial Office Memorandum of 1925.¹ There is a typical expression of this view in the words used by M. Louis Franck:² 'pour l'éducation morale c'est sur l'évangélisation qu'il faut compter. On ne fera rien de permanent sans elle. Cette conviction est indépendante de toute considération de foi ou de dogme. Elle est basée sur cette observation que la vie indigène est profondément pénétrée de religiosité, et dominée par le mystère.' It must also be acknowledged that the administration has been able to count on finding among the religious bodies many teachers who bring not only enthusiasm but professional qualifications to their task. The *Frères de la Doctrine Chrétienne*, the *Frères Maristes*, and some of the Salesian Fathers are trained teachers, and at the vocational schools there are numerous lay brothers who have practical knowledge of the industries in which they give instruction. The practical work done in the schools at Kisantu or Baudouinville is typical of the value of this system. In entrusting education to bodies of one denomination the state can claim the further advantage of a centralized organization; as expressed by the ministerial brochure of 1925 on educational policy, 'l'esprit de corps et la continuité de vues qui prévalent au sein des congrégations enseignantes permettent d'adopter une méthode, malgré les mutations de personnel'. The Congo is for this purpose divided into areas, each of which is under the control of a Vicar or Prefect Apostolic. For the rest, it may be said here that Belgian policy assigns to the African a different cultural future from that envisaged by the French; it looks less to his association with European civilization than to his fuller development within the range of his own economic and social environment. To quote again the words of M. Louis Franck, the Belgians wish to produce better Africans; they have no wish to make copies of Europeans who will never be more than 'humans of a third category'.

(b) *The Organization of Instruction*

The earliest educational efforts were authorized by a Decree of July 12, 1890, providing for the establishment of 'school colonies' for abandoned or neglected children; a further Decree of March 4,

¹ See above, p. 1229.

² *Études de colonisation comparée*, 1924, p. 123.

1892, authorized missions to receive such children into their schools. The government for its part opened in 1906 a school for clerks and three technical schools, whose object was to train Africans for government employment; of the latter, two were attached to state workshops, the other to those of the *Compagnie des Chemins de Fer des Grands Lacs* at Stanleyville, the training given being almost exclusively manual. The Concordat of 1906 provided that every Catholic mission established in the country should open a school, subject to government inspection, and teach a syllabus agreed upon with the government, which was to include agriculture, forestry, and handcrafts. The national languages (French and Flemish) were to be taught. On the annexation of the Congo by Belgium, the technical schools were replaced by *groupes scolaires*, financed by the state, but managed by the Catholic missions, and giving both primary and technical education. The organization of a complete school system was not undertaken till 1922, when the principles now followed were drawn up by a commission including representatives of the government and missions and experts from technical schools in Belgium.

The present system comprises three grades of school—namely, lower primary, higher primary or middle, and secondary. The lower primary grade is that of the village school under an African *moniteur*, controlled by inspecting officers appointed by the mission responsible for him. Here literary instruction is reduced to the minimum. The aim is stated to be the spread of ‘moral discipline, ideas of hygiene, the ferment of progress, respect and sympathy for our colonial enterprise’.¹ These schools give a two-year course. The middle schools give a course lasting three years. They must have a European headmaster (in practice a member of a Catholic missionary body) and are established mainly at urban centres; but they draw their pupils from a wide area, and often provide accommodation for boarders. In the Eastern Province experiments were made, in areas not penetrated by missionary enterprise, in the establishment of ‘native administration’ schools, built by the local authorities and supervised by administrative officials. It was found that the latter were unable

¹ E. de Jonghe, *L'enseignement des indigènes au Congo belge*, Institut Colonial International, 1931, p. 95.

to conduct an effective supervision, and steps were taken to hand the schools over to mission control. The proposal to revive such schools elsewhere with lay teachers has been discountenanced as contrary to the general educational policy. The post-primary courses last for three years and give both general and vocational education. There is a teachers' course, a clerical course, and a technical course, which includes agriculture, woodwork, leatherwork, tailoring, printing, bookbinding, carpentry, masonry, and metalwork. The subjects taught are selected with regard to the economic possibilities of the neighbourhood, and where there is little industrial employment attention is concentrated on training which can be turned to account in village life. Special *écoles ménagères agricoles* for girls teach sewing, cooking, agriculture, and child welfare.

The general school system is divided into 'official' and 'subsidized free' schools. The 'official' schools are financed entirely by the state; the majority are controlled by the religious orders, though there are a few directly under the management of government departments. There are also six schools for medical assistants, of whom an increasing use is made in the Congo, and four for midwives, managed by the medical service,¹ while the *Force Publique* organizes a number of technical courses. In 1935 the official schools numbered nine for boys, which gave some post-primary instruction, with 4,674 pupils, and two for girls, with 1,017 pupils. Subsidized schools for boys numbered 4,343 with 191,636 pupils, and for girls 209 with 16,968 pupils, in addition to eleven special girls' schools in urban centres, with 2,643 pupils. There were five teacher-training schools for girls, twenty-one for boys, four schools for training clerks, two technical schools, and eleven domestic economy (*ménagère*) schools for girls. There were also fourteen schools for European children, managed by missionary bodies. Inspection is in the general charge of a state Inspector-General, with an inspector in each province; but the major part of the detailed inspection of schools is carried out by missionary-inspectors, who report to the state inspectorate. As in the French territories, all education is free, even in boarding and technical schools.

¹ See Chap. XVII, p. 1192.

Some of the large industrial enterprises maintain their own educational institutions.¹ In the Katanga, the *Union Minière*, as part of its policy of creating a stabilized industrial population, has opened primary schools at six important centres, attendance up to a certain age being compulsory. Boys who do not go on to a technical school are kept at agriculture till they are 16, when they are apprenticed at the mines or in some other employment. These schools had 1,102 pupils in 1935. The *Huilleries du Congo Belge*, as a condition of their concession, maintain a school in each of their five circles; these schools attain a high standard of efficiency. Some schools are financed by the Kilo-Moto Company. The teaching in all these schools is given by Catholic missionaries. Some of the larger companies have also opened technical schools with the object of replacing European by African skilled labour. The Bas-Congo-Katanga Railway established four such schools in 1921, for engine-drivers, artisans, station clerks, and foremen of repair gangs, which draw their pupils from the more promising employees of the company; by the end of 1932 over 2,000 men had taken training courses. All the transport companies now organize such training. The *Union Minière* has had since 1922 a school with sections for carpentry, ironwork, engineering, and the repair of locomotives.² Both the *Union Minière* and *Forminière* train dispensers for their hospitals.

The organization of this type of instruction represents a philosophy markedly different from that of some other administrations in Africa. It is the antithesis of that which has produced the colour-bar legislation in the Union, since it seeks to recruit the ranks of industry from natives trained to exercise all the mechanical skill of which they can show themselves capable. One of the outstanding impressions left on any observer of the Belgian industrial system must be the wide extent to which the native is entrusted with the charge of machinery and is employed in work requiring technical knowledge. But at the same time the Congo Government has hitherto shown less desire to create that class of skilled 'auxiliaries' in the technical departments of government, which is the most characteristic product of the French system. It is only recently that arrangements have been made to train Africans as

¹ See Chap. IX, (*h*), p. 524.

² See Chap. XI, p. 681.

medical assistants.¹ The reason is perhaps to be found in the fact that much of the work for which the French are training Africans is done efficiently, as has already been mentioned, by European officials, both administrative and departmental, recruited in the grade of *agents territoriaux*.² The Belgians show a distrust, which is shared by some other governments, of the product of a purely literary education. It may be that this attitude is due in part to the influence of circumstances which have concentrated attention on the immediate needs of industrial and agricultural expansion; and it is noteworthy that the present Governor-General, M. Pierre Ryckmans,³ has pointed out that literacy can only create a claim to social superiority in an illiterate society, and that as soon as it ceases to be 'the privilege of a small *élite*' it will cease also to be the way of escape from the familiar environment.

(c) *The Language of Instruction*

The principle followed with regard to language is that the medium of instruction should be the vernacular, and that only those natives who are to live in close contact with Europeans should learn a European language; the only language which they should learn is French; this should be taught as a subject in the middle schools.⁴ It is, in fact, obligatory in these schools. Flemish, originally taught in some of the schools as one of the two official languages, has now been abandoned as a subject of instruction. There is at present no recognized lingua franca, as is only natural in so vast a territory. An adapted form of Swahili called Kingwana,⁵ somewhat different from the Swahili spoken in East Africa, is used as the medium in the Katanga schools, and in those of the Eastern Province, and appears to be making its way elsewhere; Lingala, Luba, and Kongo are also used over wide areas.

(d) *The Mandated Area of Ruanda-Urundi*

In Ruanda-Urundi the educational system follows that of the Congo in its wide use of religious bodies, who are here also predominantly Catholic, though the Concordat of 1906 does not

¹ See Chap. XVII, p. 1186.

² *La politique coloniale*, 1933, p. 104.

³ See Chap. III, p. 95.

⁴ See Chap. VI, p. 244.

⁵ E. de Jonghe, *op. cit.*, p. 88.

apply to the territory. Article 8 of the mandate, which follows generally the terms of the St. Germain Treaty, specifically accords to all religious bodies an equal right to erect religious buildings and open schools. There is evidence that there has been in Ruanda-Urundi the same difficulty arising from the competition of different denominations for school sites as has been seen in some of the British areas, and there was at one time a complaint that chiefs, who have the power of vetoing the grant of land for this purpose, had been influenced by their officers to exercise their powers to the prejudice of the Protestant missions. Local orders issued in 1936 were directed to impressing on the chiefs that there must be equality in this matter, subject to the standing rule that no mission can take up a site within two kilometres of another. There is the same general restriction of subsidies to 'national' bodies as prevails in the Congo; in Ruanda-Urundi, however, there is one Protestant mission which is qualified by the Belgian nationality of its personnel to receive the state aid. It is interesting to note the relative importance of the activity of the different denominations under these conditions. The Catholic primary schools had in 1935 a total of 29,671 pupils, or, including the *chapelles-écoles*, a rudimentary type of bush school, a total of 163,635; the Protestant primary schools had 2,695 pupils or, including bush schools, 19,300. Out of these totals, Catholic schools had subsidies for 29,471 pupils, and the Protestant missions for 5,645. There are some 530 pupils in schools maintained for Moslems.

Schools are classified in Ruanda-Urundi on the same system as in the Congo. An inspector of education is maintained by the state; but the only school classed as 'official', which is also the only one giving an education beyond the primary stage, is that at Astrida, which trains clerks, typists, and lower subordinates in the technical services. This school is under the charge of a Catholic body. The Nyanza school, which formerly gave instruction of the same nature under charge of an administrative official, has now been closed. The Astrida school also provides for the education of sons of chiefs, and the fact that the provision made for this class brings it under the control of a denominational body has attracted some comment by the Permanent Mandates Commission.¹

¹ *Minutes of the Thirtieth Session, 1936*, pp. 145 ff.

VII. THE PORTUGUESE COLONIES

In Portuguese East Africa there is a dual educational system for African and for European or Europeanized children. For the Africans there are primary schools of two grades followed by technical training. The lower primary course extends over three years and is officially described as a comprehensive course including the Portuguese language, geography of Portuguese territories, drawing, geometry, handwork and agriculture, physical training and hygiene, moral and civic education, and Portuguese songs. Portuguese is the normal medium of instruction. The vernacular may only be used in primary schools and then only for oral teaching. This ruling has been criticized by many missionaries, who found that children who had been taught to read and write in their own language were able to learn Portuguese more quickly than the others. In Moçambique three technical schools train tailors, shoemakers, carpenters, smiths, locksmiths, and typists, while one girls' technical school teaches sewing and domestic economy. These schools give a three years' course, which is stated to include higher primary education and apprenticeship to a trade. For children residing within 3 kilometres of a school, education is free and compulsory between the ages of 7 and 12 years. The official figures of school attendance do not distinguish between native and European schools. According to them, the state maintained 156 lower and 54 higher primary schools, with 12,345 and 4,131 pupils respectively, and missions maintained 254 lower grade schools with 36,918 pupils and 10 higher grade schools with 493 pupils; there were 2 'normal' schools for natives, with 72 pupils, and 42 technical schools with 1,676 pupils.¹ Until recently mission teaching was largely in the hands of Protestant non-Portuguese bodies, who established themselves in the territory in the middle of the nineteenth century and started numerous schools. The Catholics, after the collapse of their earlier efforts, did not come into the field until later. In 1935, however, an amendment was introduced to the Colonial Charter of 1933 providing that only Portuguese Catholic missions should receive state aid. It was felt that the Protestant missions, by effecting a breach in the religious homogeneity of the people and by their use of the vernacular in schools,

¹ The last official report on education in the colony was issued in 1931.

hindered the development of the Portuguese national spirit which it was desired to foster. One non-Portuguese body, the Swiss mission, has been able to meet the requirements of the law by establishing a consultative body in Lisbon and agreeing to recruit a fixed proportion of its missionaries from Portugal.

The European system includes primary schools and one secondary school at Lourenço Marques, giving courses identical with those in Portugal; an evening commercial course is attached to the secondary school. In 1935 the secondary school had 479 pupils, of whom three were African. Education is free and compulsory for children from 7 to 13 years. Training for service in government departments is open to children from the European primary schools: such training is organized by the Public Works, Medical, Printing, and Survey Departments.

In Angola the latest figures available (1930-1) give a total of 124 native schools with 6,537 pupils; of these 58 were managed by the state, 28 by Catholic, and 38 by Protestant missions. The Protestants experience the same difficulties there as in Moçambique, though before 1935 some of their schools received government subsidies. More attention appears to be given both by government and by missions to agricultural education in Angola than in Portuguese East Africa. European secondary education is more highly developed than in Moçambique; there is a big *lycée* in Loanda leading from the elementary school to the university, its final two years' course being similar to that given in American junior colleges.

VIII. GENERAL REVIEW

(a) *Principles Applicable to Native Education*

The review of educational systems in the preceding pages has been as far as possible objective; an attempt to discuss underlying principles will naturally raise more controversial issues.

In the opening paragraph of this chapter it was suggested that education in Africa should have a double function, namely, to provide the African with a better equipment for dealing with his own environment, and to prepare him for the changes to which that environment will in increasing measure be subject. It is clear that in the British areas in Africa attention at the outset was

concentrated so largely on the second of these two purposes as almost to exclude the first. The beginnings of education in Africa were laid in an age which assumed without question the intrinsic value of European civilization; African institutions were judged purely in terms of their resemblance to those already known, and concern for the improvement of African conditions manifested itself in the effort to make them approximate as closely as possible to those of Europe.¹ To many who held that view, the Christian religion was an essential element in the introduction of the African to civilization; hence the importance of mission schools, and the official encouragement given to missions. Present-day thought is not without reason critical of such an attitude to the problems of education. But in justice to our predecessors we ought not to forget that earlier policies were framed without the knowledge and experience that have since been gained. We ourselves can only ask of posterity that we should be judged by our efforts to comply with the most enlightened standards of our own time; examined by this test, the sincerity of purpose which animated many of the pioneers of African education is not open to question.

There were, of course, other less reputable influences at work. Many thought that if the African were to be allowed any introduction to European civilization, it should only be in the lowest grades of European industry. They insisted that education should be restricted to manual training and the minimum literacy necessary for a workman in European employment. This, however, cannot be treated as serious educational theory, and it is the efforts of those who were earnest in their attempt to civilize the African that must be examined. They concentrated their attention on providing literary courses, combined with the earliest and fullest possible instruction in a European language. Critics of African education, in speaking of the literary nature of a syllabus, frequently apply to the term a connotation which it does not justly bear; in this case, criticism must turn less on the literary character of the courses than on the fact that they attempted to engage the interest of the pupil in matters which lay outside the needs and experiences of African life. The history and geography which he was taught were often those of Europe; the teaching of literature tended to

¹ See the Privy Council Memorandum of 1847 referred to above, p. 1229, note 3.

confine itself to the grammar and syntax of a European language; there were at least some instances in which the pupil was taught the botany of European, not African plants. It cannot justly be argued that education of this kind conveyed no benefit whatever to the pupil. There must have been many to whom it gave a quicker intelligence and greater breadth of outlook, and school life, especially in the boarding-school, must have helped to produce habits of discipline and application. But it could not be said to be the type of education most adapted to help the African to make the best of his own environment. Some of the educational pioneers failed to realize that a type of instruction which might be suitable for the selected few designed for employment in teaching or in government service could not meet the needs of the population at large. In the second place, they did not recognize that even the education they were giving to the select few was not really adapted to the needs of men who, even if they were in clerical European employment, yet had to remain members of an African society.

As has been said before, the future which the early educationists envisaged was the development of the African on European lines, and they looked on education as the most potent influence for directing the process of evolution. To-day it will be generally agreed that it is not possible to forecast the precise direction which evolution will take, nor what type of social and cultural structure will eventually result. It will be determined by many influences, other than those which flow directly from administrative or educational policy; the introduction of a new economy, new methods of communication, and new occupations will equally have their effect, and the result will depend on the reaction of the African character to this complex of new influences. So far as deliberate policy can affect the issue, it is clear that in the interests of the African himself it should seek to moderate the pace of change, and allow full scope for the innate characteristics of the people to assert themselves in the conflict of forces that must ensue.¹

(b) Popular Education

Although in some respects education in British areas at the present day is by no means free from the burden of its earlier

¹ For a fuller discussion of this subject, see B. Malinowski, 'Native Education and Culture Contact', *International Review of Missions*, Oct. 1936, pp. 480-515.

traditions, there has been a significant change in the direction of policy. Emphasis is now laid on the first of the two purposes of education mentioned above, and attention is concentrated on the attempt to fit the African for dealing with his own environment. Many influences have contributed to this result. An age of positive values has been succeeded by one which recognizes that the worth of an institution must be judged in relation to the conditions in which it operates, and, as a necessary consequence, there is a growing appreciation of the need for sociological study of the reaction of primitive peoples to the introduction of new institutions. The general agreement that education cannot be confined to a few, but must progressively extend to the mass of the population, has focused attention on the problem of finding a suitable content for 'popular' instruction, which must bear a close relation to the realities of African life. The report of the Union Interdepartmental Committee on Native Education of 1935¹ is a significant mark of the change of South African opinion under the influence of this consideration. In the British colonies the new conception of the function of education seems to have been a consequence of the growth of the system of indirect rule, which is itself less a type of political institution than a philosophy based on an appreciation of the needs of native life. The new outlook found concrete expression in the memoranda of the Advisory Committee of the Colonial Office,² which have not only had their effect on government policy, but have served to give direction to the activities of missionary bodies. The result has been an increased use of the vernacular as a medium of instruction, the production of more text-books suited to African pupils, the introduction of agriculture and of manual training as part of the school course, the spread of teaching of the type associated with the Jeanes schools, and the substitution, at the secondary stage, of training of a vocational nature for literary instruction.

This policy of 'developing the African on his own lines', though in many ways an advance on earlier conditions, has nevertheless had its critics. There are Africans, particularly on the West Coast, who feel that an educational course which is designed to suit African conditions carries with it its own confession of inferiority.

¹ See above, pp. 1217, 1221.

² See above, pp. 1229-32.

There are, again, Europeans who feel that the policy ministers to the prejudices of those who, apprehensive of the economic competition of the native, would confine him to a separate world of thought and social habit. Neither objection can be lightly dismissed; in particular, no policy in education can succeed unless it carries the goodwill of Africans. But the objections appear to overlook the essential fact that the policy is not decisive of the whole course of African education; it applies only to that type of primary teaching which is given to the great mass of people who are predominantly rural in character.

The political philosophy underlying the French method makes it difficult to apply the same standards as have been used in examining the British. Education is the main instrument for carrying out the French policy of association, and it works through the dual system already described. This system is designed, on the one hand, to create an *élite*, inspired by French ideals of civilization, which will be fitted to take its part in the administrative life of the territory, and, on the other, to provide a popular form of instruction suited to the needs of the masses. The method chosen for the education of the *élite* is logically planned, and appears successful in attaining its purpose. The French pay greater regard to African conditions in their system of education for the masses: the rural school aims at improving the native as an agriculturist, and the urban school at assisting him to gain his livelihood in the towns. Through the fact that all education is free, equality of opportunity is secured, as it cannot be when the pupil's chances of completing his course depend upon his father's income. It is doubtful, however, if this dual system can be maintained in practice. The French political ideal prescribes the use of the French language as a universal medium of instruction. The use of French in the popular schools, and the interest in French culture which it stimulates, must tend to give the pupil an outlook which will differ only in degree from that of the *élite*. The whole trend of the French method is in effect towards the production of a civilization essentially non-African in character.

The Belgian system shows no such clearly marked tendencies. Its two distinctive features are a utilitarian outlook and a close association with religious teaching; the Catholic Church is mainly

responsible for education, and has a predominating influence in the majority of the schools. There is no planned effort to create an *élite*, and, wherever possible, the vernacular is used in the earlier stages of instruction; manual training is given a prominent place, and almost all post-primary education is vocational. It is necessary, however, to remember that the present educational system, like most other administrative institutions in the Belgian Congo, is a post-war creation, and the official Belgian attitude towards the introduction of the African to a European form of culture is not yet clearly determined.

The Portuguese educational policy, so far as its features can be distinguished, would seem to aim at Europeanizing the African; but it does not at present display the same force or directness as the French system, and it is perhaps unlikely that it will in the future. In any case, the conception of a 'European' form of civilization would hardly be the same in the Portuguese as in the French colonies.

The trend of educational theory noted in the British areas is clearly marked, but it has not yet acquired that systematic character which is so marked a feature of French policy. True, there is always value in elasticity of method, and systematization is often most successful when it waits on experience instead of following a rigid logic, but the fact remains that the British colonial governments have placed widely different and indeed inconsistent interpretations upon the policy indicated in the memoranda of the Colonial Office Committee. It has been suggested that to remedy this defect should be one of the first of British aims. The inequality of expenditure in different areas is striking. It is not merely a question of increased financial provision, though that will obviously be necessary. The Commission on Higher Education in East Africa¹ recommended that an extra £50,000 per annum should be spent on primary, secondary, and vocational education in Uganda alone, quite apart from the money necessary for the proposed development of the Higher College.

If the policy is to be fully applied, the state will have to assume greater responsibility for education, and direct more systematically the syllabus of instruction, in association with the advisory

¹ *Report*, op. cit., Colonial 142, 1937, p. 116.

bodies which it has created. In approaching this task the administrations will encounter many problems which still require solution. It may well be felt, for example, that the time has arrived when the state should show greater discrimination in the support it gives to the smaller mission schools. It is true that the value of education lies as much in the formation of character as in the quickening of intelligence, and true also that religion is an important factor in the formation of character. But religious instruction, more than any other type of teaching, demands understanding and personality on the part of the teacher if it is to exercise any permanent influence, and it cannot be claimed that the small bush school, with ill-trained staff and irregular attendance, has any more value for character training than for giving instruction. An effort should also be made to eliminate wastage. At present, a large number of primary schools are clogged with older children who have failed to make progress and are unlikely to do so. Some system of superannuation would seem to be indicated. Another problem is the difficulty of assigning to literary and manual instruction their due place in 'popular' education. It is not now questioned that popular education must contain an element of literary instruction, though it is argued that its content must be related as far as possible to African needs and experiences. Manual work can, under suitable conditions, have an educative influence, but its utilitarian value is limited, for it is doubtful if, in the short period which general education covers, it can be more than a preliminary to instruction in a craft or trade. There is, again, the question whether the primary stage of education should be complete in itself, or designed to afford a preparation for a more advanced course. There would appear to be a growing agreement, save in some parts of West Africa, that since the majority of pupils can scarcely complete even the primary stage, the instruction given at that stage should be as far as possible complete in itself; experience shows that this is not incompatible with the provision of a ladder by which selected students can proceed to higher courses either of vocational or other training.

But here there is a practical issue involved. Popular education, if complete in itself, cannot provide a sufficient period of instruction in a European language to give the pupil an adequate know-

ledge. The recognition of this fact inevitably produces a demand for a further course, and the popular course tends to assume the character of a preparation. This in turn reacts on the whole syllabus of popular education.

The place to be given to the vernacular, or alternatively to a European language, in popular education, is thus a crucial problem. There can be no question of the value of the vernacular as the easiest approach to the mind of the pupil, and therefore it is clearly the best medium of instruction at the earliest stage, and is in practice widely used at that stage. But the recognition of this fact still leaves for decision the question whether, as soon as the initial stage has been surmounted, further study should be conducted in a vernacular or a European language. The matter has already been dealt with, and some of the difficulties involved are further illustrated in a previous chapter.¹ Discussions on this question show a marked difference of view regarding the answer to be given. There is little disposition on any side to question the general proposition that the language of a people is an essential part of their life, and is for them the most effective instrument of thought; the division of opinion arises over the implications of this principle. There is in the first place the practical objection that we cannot treat every tribe as a people or every dialect as a language; apart from the obvious difficulty of finding adequate teachers for the numerous dialects involved, many of which have as yet no script, we should be in danger of creating barriers to that intercommunication of thought which is essential to intellectual progress. The attempt to meet this difficulty by the use of a *lingua franca* or a 'union' language is open to the argument that we thereby create an artificial medium which is alien to the people, though admittedly less so than a European language. The French would add that it is a waste of effort to teach Africans to read in a language that has no literature, and then write books for them ourselves to satisfy the new demand for reading matter. There are, in the second place, those who feel that it is not possible to disregard the strong desire shown by many Africans for a knowledge of English, not only for its use as a medium of approach to the administration, and in commercial and industrial relations, but as

¹ Chap. III.

a symbol of a higher status; experience elsewhere shows that this represents a force which is capable in the long run of prevailing over any determination at which educational authorities may arrive. There are, thirdly, those who urge that even the most convinced advocates of the vernacular do not suggest that higher education can for the present be conducted in any of the African languages. They conclude that, on all these grounds, the claims of English as a medium of instruction must outweigh those of any of the vernaculars.

In seeking a conclusion it is inadvisable to assume that any course now adopted must necessarily represent a final policy; educational procedure must adapt itself to changing circumstances, and not the least of these will be the change in outlook of Africans themselves. Not only is a final decision impracticable, but local differences may reasonably be felt to be such as to make any uniform solution impossible. There are conditions, such as those of the urban and some other areas in South Africa, in which native life is so closely bound up with a dominant white civilization, that the native is not adequately equipped to meet the conditions with which he has to contend unless he knows a European language. There are some areas in West Africa where conditions point to the same conclusion; with every desire to assist the African to retain an interest in his own institutions, it must be realized that Africans in this area are not likely to accept as sufficient any course of instruction which does not give them teaching in English. Indeed, it is a significant feature of African opinion on the West Coast that even a local provision for education up to university standard is viewed with suspicion, as an inferior alternative to facilities for study at British institutions. Elsewhere the balance of argument appears to incline in favour of the use of the vernacular; but the whole question is one which, alike in its importance and complexity, seems to require that the administrations should seek the fullest collaboration of sociological inquirers in considering the consequences involved.

(c) The Payment of Fees

In French territories, where, as we have seen, education forms part of a policy of political and economic development, education is

free, but the authorities limit the numbers of pupils who are allowed to attend the higher courses. In British areas the usual policy is to charge fees, and in government and missionary boarding-schools, such as those at Fort Hare, Achimota, Budo, Makerere, and elsewhere, charges are made which, in the absence of bursaries or exemptions, would preclude any but the more well-to-do Africans from attending the courses. Thus annual fees in Uganda boarding-schools vary from about £3 to more than £20; in the Tanganyika boarding-school fees are £3; in the Gold Coast in ordinary schools they vary from £2 to £6, but at Achimota they amount to £33, exclusive of the cost of school books; at Fort Hare they are £10, or a fifth of the actual cost of board and schooling. In primary and bush day schools small fees are the rule, and may consist of small contributions of food towards the maintenance of the teacher or small sums such as 3*d.* a school term. Where local levies exist to provide native administration schools, fees do not appear to be charged, but in the Northern Provinces of Nigeria, where most of the cost of education is met from the native treasuries,¹ fees are charged and paid into the treasuries. In 1936 they amounted to 6 per cent. of the cost. In Northern Rhodesia it is said that the imposition of small school fees and payment for school books counteracts irregularity in attendance, which otherwise is prevalent. It has to be remembered that, except in the form of experiments in limited areas,² compulsory education does not exist, and as children assist their parents in the house and garden they are not willingly spared for long periods. On the other hand, it is objected that the payment of fees often precludes comparatively poor chiefs and headmen from sending their children to boarding-schools, while wealthy salaried employees find no difficulty in meeting the expense, and thus, in some areas, the educated class may be inadequately represented among the ruling families.

The question of payment of fees is of considerable importance in connexion with comparatively expensive higher education, and if the best pupils are to be brought forward for training for the public services, or for service in the native administrations, bursaries or scholarships, or grants from government or local funds,

¹ See above, p. 1233.

² See Nyasaland, *Report of the Education Department*, 1936, p. 20.

would appear to be necessary, to cover not only board and school fees but also travelling. Alternatively, where various governments make grants towards the maintenance of a centre for higher training, such as that of Makerere, it will presumably be for each contributor to decide how much will be demanded in fees from the candidates from its area.

(d) *Higher Education*

The considerations which decide the character of higher education are largely political, for the type of instruction given depends on the view held of the place in society which the educated African may be expected to fill. As has more than once been remarked, the French look on the more highly educated African as a member of an *élite* whose specialized training fits him to assist the administration in carrying out its own ideals of civilization. By limiting themselves to this objective, the French have clearly defined the educational issue, and have evolved a system well adapted to its purpose. At present, the educated French West African takes an important but usually subordinate part in the administration.¹ Though persons of African origin are represented in the colonial administrative cadre, the majority come from West Indian colonies, and have qualified for service by completing their education in France.² That West Africans are not yet represented in any number is due to the fact that on passing out of the local professional schools they have been at once absorbed into the specific employment for which they have been trained. French policy has not favoured the appearance of the educated African at the local Bar; in the absence of a legislature he has not the political opportunities which are open in the British Gold Coast or Nigeria, nor has he attained the same importance in journalism. On the other hand, the absence of colour prejudice makes it possible for the educated African to live in some considerable measure on equal terms with the Frenchman, and the colonial aspirant can hope also to secure a place in the activities of the mother country.

British policy as yet exhibits no clear view of the future of the

¹ See Chap. VI, pp. 237, 239, 241.

² It may be remarked, however, that an African, M. Eboué, is Secretary of the French Sudan, and from time to time acts as Governor.

educated African. Though, as has been shown, there has of recent years been a movement in favour of vocational rather than general education, it has not been carried to the length of confining education to vocational courses or restricting the number of those entitled to receive them. At the present stage in the evolution of educational policy, it is of importance to know what position it is intended to assign to the African in the service of the administration. On this point, however, there has been no declaration of general policy. There have been some expressions of opinion by local authorities on the subject, as, for instance, that all posts in government service, except those of political officers and judges, are in future to be open to Africans who have reached the required standard of education, or that, on grounds of both justice and economy,¹ the general interest requires that there should be a progressive substitution of an African for a European establishment. That no principle of general application has been formulated by the Colonial Office is not, as has sometimes been suggested, due only to the difficulty of forecasting the precise form of the political and administrative structure which will be evolved under the influence of the theory of indirect rule. There are few instances in British colonial history when the future of the educated native has been consciously determined, or the educational system deliberately adjusted to fit him for it. Accepting the general value of an education based on the European model, British governments have been content to wait until the product of that type of education has asserted his claim to a position in the political or administrative life of the country; when the position has been finally accorded it is more often in recognition of a claim which has been tacitly encouraged than as a result of a predetermined plan. It may be justifiable to conclude that for some time at least it is unlikely that British administrations in Africa will commit themselves to a definite view of the future of the educated African and give a decisive direction to the educational system. The effect of the report of the Commission on Higher Education in East Africa remains to be seen. That Commission recommended a generous education policy, emphasizing the fact that there is little danger of creating

¹ Address by the Governor to the Legislative Council, Gold Coast, 1926.

a class of educated unemployed, as there is a growing need in Africa for the services of educated Africans. It was, however, strongly impressed with the need for a practical outlook on educational policy. 'The primary need of East Africa', it said, 'is the use of her soil';¹ and again, 'The main purpose of the East African governments in education . . . must for the present be the improvement of agriculture, animal husbandry, and health.'² For the present, therefore, there is likely to be an increasing emphasis on the vocational character of higher instruction, on grounds of expediency if not of general principle.³ The relative part to be played by types of instruction which seek to meet existing demands for specific knowledge, and those which are more concerned to create a philosophy of life, must await a decision as to the degree of responsibility which it is intended ultimately to give to the African in the management of his own affairs. It is, finally, clear that all higher or professional training will be carried on in English; it will be many years before the African is likely to initiate a movement similar to that now seen in India, for the use of the vernacular as a medium in higher education.⁴

(e) *Native Art and Music in Education*

An educational problem which deserves more study and discussion than are possible in connexion with the present Survey is that of the teaching of art and music in native schools. Indigenous African arts and music are primarily functional: the African artistic genius has produced objects of singular beauty inspired by religious beliefs and social customs and the necessities of social and domestic life. These sources of inspiration are profoundly modified, if not destroyed,⁵ by modern conditions, and there is evidence of a decline in artistic taste, accelerated by the replacement of indigenous articles by those of European manufacture, the commercial exploitation of so-called native crafts, and lack of encouragement. In this connexion the efforts made at Achimota, where teacher-training pupils are taught carving by African

¹ *Report*, op. cit., Colonial 142, p. 14.

² *Ibid.*

³ See, for instance, the speech of the Governor of Tanganyika quoted in *Report to the League of Nations on Tanganyika Territory*, 1937, p. 195.

⁴ All teaching in the Usmania University, Hyderabad, is now carried on in Hindustani.

⁵ D. Westermann, *The African To-day*, 1934, p. 100.

instructors, using as far as possible African tools,¹ are of particular interest, and are said to demonstrate that the peculiar characteristics of the African artistic genius persist in whatever form of art is found most suitable.² It seems that the teaching of a type of handwork, closely related to the traditional crafts and forms of art, in lower as well as more advanced schools, assists in preserving and developing traditional standards of taste. Difficulties may be experienced in musical training owing to mission influence, which favours European tunes, and owing to the changes in the social customs by which indigenous music was inspired.³ An extensive survey of native music has been made by Professor P. R. Kirby.⁴ He considers that the teaching of music in native schools can be improved by a study of African systems of harmony, and cites the apparently successful experiments carried out by the Rev. A. M. Jones at Fiwila, in Northern Rhodesia, in the use of new tunes adapted to the rhythm of the local vernacular.

IX. CULTURAL AGENCIES

(a) *The Communication of Ideas*

Education in Africa, as has already been suggested, consists not so much in handing on to a new generation accumulated stores of knowledge and experience, as in helping the African to adapt himself to a new and rapidly changing world. The phenomenon of rapid change is not confined to Africa, but in other continents, where the gulf to be bridged is far less wide, discomfort and disturbance have been reduced by means of highly developed machinery for the spread of new ideas and information. The press has played its part in popularizing scientific discoveries, political ideas, and new knowledge regarding social customs. Broadcasting tends to familiarize an immense public with points of view and information hitherto unfamiliar to them; and when it is used consciously as an aid to education, scholastic or civic, or to political propaganda, its persuasive effect is perhaps greater than that of any other agency.

¹ *Report on Achimota College*, 1934, p. 16.

² *Arts of West Africa* (ed. M. E. Sadler), 1935, p. 15.

³ P. R. Kirby, 'The Effect of Western Civilization on Bantu Music', *Western Civilization and the Natives of South Africa* (ed. I. Schapera), 1934, pp. 131 ff.

⁴ For a list of his publications see *The Bantu-Speaking Tribes of South Africa*, 1937 (ed. I. Schapera), pp. 441-2.

The cinema has also played a large, though not invariably a beneficent, part in moulding social ideas.

In Africa, over the greater part of the continent, these agencies scarcely exist; but in view of the importance which attaches to the printed word, the broadcast word, and the moving picture as instruments of political and social change, some estimate of the extent to which they are available to assist Africans to adapt themselves to new conditions cannot be omitted from this Survey.¹

It is convenient to draw a distinction between two types of communication. Books and newspapers circulate directly only among literate populations, though literates frequently read to illiterates. Print has therefore a limited though an extremely important public. Broadcasting and films can make direct contact with people who cannot read. It has been suggested elsewhere that these agencies are likely to make a more direct appeal to partially educated than to totally uneducated people.² While this may be so, it is true that Africa has, as will subsequently be shown, only a limited experience of their use, and it is not possible to speak with confidence of the extent of the influence which they may be able to exercise.

(b) *Books and Newspapers*

European. The supply of books for Europeans in Africa presents special problems. The official, trader, or missionary, cut off for long periods from normal intellectual stimulus, may suffer for lack of adequate reading matter. The growing place of library services in western countries, both for general and for special use, has helped to direct attention to the inadequate facilities in African colonial territories. In the Union, libraries, municipal or university, have grown up in European centres on the usual lines. In 1929 the Carnegie Corporation of New York published two memoranda on libraries in the Union, Rhodesia, and Kenya, covering European and non-European readers. They subsequently gave grants for the establishment of a central library in Pretoria, as well as for developments in the other territories covered by their

¹ C. C. F. Dundas, *Means of Spreading Thought among the Natives*, and H. Jelgerhuis-Swildens, *Les moyens modernes de la diffusion de la pensée dans les colonies*, Institut Colonial International, 1936.

² See Chap. XVI, p. 1110, and Chap. XVII, p. 1199.

inquiry. A children's library has been opened in Nairobi, and a central students' library is under consideration. Some library facilities exist in most British territories, though often official or technical in character, and many missions maintain small European libraries. The beginnings of a library in Africa for Belgian Congo officials go back to 1898, and administrative libraries were established by a decree of 1910. In 1931 a further decree authorized the Governor-General of the colony to set up public libraries: these are managed by commissions consisting of officials and an equal number of readers' representatives. There are now some twenty-three public libraries in the Belgian Congo and Ruanda-Urundi, though, as a result of economic stringency, a government subsidy is available for Léopoldville only. There are also mission libraries and libraries attached to technical departments of government.¹ A similar interest in European libraries is developing in French territories in Africa,² and provision is being made for the institution of a library at Dakar.

African. The demand for European books among Africans ranges from the professional man in Lagos with a well-stocked private library to the child or adult who requires the simplest reader. Both mission and secular presses, at home and in Africa, now issue a considerable number of books in European languages specially prepared for African readers. These are mainly devotional or educational in character, and in many of them one of the varieties of simplified English is used. 'Basic English' is framed on a selection of 850 scientifically selected 'basic' words which, it is claimed, cover all the essential 'operative words' and 'directions', all synonyms being excluded.³ Further words can be added to enrich this minimum and to include words both of universal and of local usage. Other systems are based on word-frequency counts, and use graded vocabularies beginning with 1,000 words.⁴ An inquiry financed by the Carnegie Corporation of New York⁵ devoted two years' study to the problem of simplified English, and

¹ G. D. Perier, 'L'évolution des bibliothèques coloniales belges', *Revue internationale des sciences administratives*, no. 2, 1935.

² French West Africa, Circular of Governor-General, Aug. 26, 1931.

³ C. K. Ogden, *The A.B.C. of Basic English*, 1938.

⁴ *New Method Reader* (ed. M. West).

⁵ *Interim Report on Vocabulary Selection*, 1936.

further research is being undertaken by the Institute of Education in London.

Apart from educational books, there is a growing African public for general reading; it is said that there is a sale for the books of Edgar Wallace among the Gold Coast African police, and that *Little Women* and *A Tale of Two Cities* are read by Nigerian school-girls. African authors who wish to reach an audience beyond their own language group necessarily use European languages. The *Prix Goncourt* was won in 1921 by René Maran, a native of French West Africa, and a substantial number of Africans have published books in English. Libraries for Africans are still in the elementary stages. Some of the grants made by the Carnegie Corporation of New York were given for setting up circulating libraries in schools and other centres south of the Zambesi. Some Departments of Education are experimenting with teachers' libraries. The University of the Witwatersrand has a non-European reading-room and reading circle. In West Africa the library of Achimota College is made available for old students, and individual Africans are initiating small circulating libraries. One native treasury in Southern Nigeria has granted funds for a local library. A stage seems to have been reached in which co-operation between different agencies and neighbouring territories would yield valuable results. At present, few facilities exist for the sale of government publications in territories outside the territories of origin, though they frequently deal with matters of common interest.¹

The larger problem of books for Africa, however, concerns the provision of reading matter in the many languages and dialects of the continent.² Over large areas the demand for books and newspapers in native languages is considerable. This was recognized by the Protestant missionary societies when in 1929 they set up an International Committee on Christian Literature for Africa, on which Bible societies, religious publishing houses, and other similar bodies were represented. It was found that only some 250 of the languages of the continent were provided with written material. The Bible, the most widely read book in Africa, already

¹ 'Books for Africa', *Quarterly Bulletin of the International Committee for Christian Literature for Africa*, vol. vii, no. 2, 1937.

² See Chap. III, pp. 68-70.

exists in about 240 languages, but schoolbooks are still poorly represented in many language areas, and for post-school reading the provision is poorer still. There appears to be an unsatisfied demand for simple books on health, and for explanation of government and its agencies. The International Institute of African Languages and Cultures has done much to encourage the writing of books by Africans in their own languages, by offering prizes for manuscripts and by assisting in their publication.¹

The vernacular press is beginning to play an important part in some areas of British Africa.² In the Union some fifteen native papers circulate, the *Bantu World* in six languages. A vernacular paper is published by the Transkei General Council. In Southern Rhodesia the *Native Mirror*, with a circulation of some 3,500, appears in three languages, and its distribution is assisted by the Native Affairs Department. In Northern Rhodesia a government newspaper, *Mutende*, with articles in English and in several vernaculars, represents an interesting experiment in securing native co-operation and interest. The Tanganyika Government has produced *Mambo Leo*, a native monthly journal in Swahili, with an African secretary. This paper, which circulates through East Africa, contains lively correspondence pages and is much read aloud in villages. Its rising circulation has now passed 14,000. The Tanganyika Education Department also publishes a journal, *Mwanafunzi*, for schoolchildren. In Kenya a government organ, *Habari*, was given up for financial reasons, but there is a vernacular paper produced by the Kikuyu Central Association. In the remaining British territories of East and Central Africa the native journals are mainly missionary. In West Africa, besides the many African-owned newspapers in English, the *Northern Province News* in English, Hausa, and Arabic is an official organ.

In French Equatorial Africa there is no native press, though occasional articles are contributed by natives of the territory. French West Africa is more liberally supplied, with an Arab weekly in Dakar, and a variety of small-circulation journals in French and in the vernacular, in which educated Africans take part. In the Belgian Congo native papers in local vernaculars are published by the missions and are mainly religious. In Angola

¹ See Chap. III, p. 69.

² Ibid.

and Moçambique likewise there are vernacular mission papers both daily and weekly.

The production, distribution, and storage of books in Africa present peculiar difficulties. Cost makes vernacular publication a non-commercial business when the buying public is very poor. Mission bookshops, caravans, and book dépôts run by Africans assist in distribution, but for reaching a wider public it has been suggested that bookstalls in African markets might be developed, and boxes of books at village schools. Damp, white ants, and other pests are often destructive of books and paper. Nevertheless, in view of the immediate and urgent need for the wide dissemination of the elementary facts of hygiene and better living generally, every effort to spread the use of the printed word is valuable. An example of the way in which illiterates may be reached by books was the formation of vernacular reading circles in Tanganyika. These were managed by volunteer native readers; in one case the readings were attended by over a hundred listeners; in another the listeners increased to 300 and had to be divided into three groups, and the interest aroused led to a demand for evening reading-classes for adults.¹ From such rural listeners at one end of the scale to the small but important groups of educated Africans in urban areas at the other, books are essential to the spread of information and the development of public opinion, and, since literacy is steadily increasing, it would be regrettable if the supply of literature were to remain inadequate.

(c) *Broadcasting*

Wireless communication has already provided valuable links for Europeans in Africa with their home countries and with the outside world in general, through the development of European short-wave stations catering, indeed competing, for the ears of overseas communities. Since Sir John Reith's report on Broadcasting Policy and Development in the Union of South Africa² resulted in the establishment in 1936 of the South African Broadcasting Corporation on lines analogous to those of the British Broadcasting

¹ A. T. and G. M. Culwick, 'Social Propaganda in Illiterate Africa', *Oversea Education*, vol. viii, no. 5, 1938.

² Sir J. C. W. Reith, *Report on Broadcasting Policy and Development*, U.G. 18, 1935.

Corporation, the service, which had begun on a commercial basis as early as 1924, received a fresh impetus, and programmes, both cultural and recreational, have since been considerably developed. The necessity for a bilingual service in English and in Afrikaans in parts of the Union adds greatly to the difficulty of programme building; in spite of this there were in 1937 over 160,000 licences, varying in cost from 35s. per annum for listeners near a main station to 10s. for those at greater distances. The Corporation operates three main stations and three relay stations, together with two experimental short-wave stations. A proposal is under consideration to take over a military short-wave station, to be operated from Pretoria, as one of the most powerful short-wave transmitters in the world. This scheme, if put into effect, would provide a link with the whole continent.

Experience in India¹ has shown that advice and instruction can successfully be given to certain types of illiterate people by means of wireless programmes, if these are used with full understanding of the medium as well as of the audience; among people of some measure of education it is possible to accept broadcasting as a recognized medium of instruction and culture, whatever its other potentialities for good or ill may be.² Its use by administrations would make it possible to communicate a larger amount of new information at first hand, instead of through second- and third-hand agents of doubtful reliability. Its capacity to suggest the living personality behind a voice gives it an advantage over printed instructions, even where these can be read, and would enable officers to maintain continuous contact with the people of their villages. Such developments have up to the present been hampered by financial considerations, as well as by technical problems such as the availability of wave-lengths and atmospheric conditions.

In February 1936 a committee was appointed by the Secretary of State for the Colonies to consider and recommend what steps could usefully be taken to accelerate the provision of broadcasting services in the Colonial Empire, to co-ordinate such services with

¹ 'Broadcasting in India', *The Times*, July 27 and 28, 1937.

² *School Broadcasting*, and *The Educational Rôle of Broadcasting*, League of Nations, International Committee for Intellectual Co-operation, 1933, 1935; H. Matheson, *Broadcasting*, 1933.

the work of the British Broadcasting Corporation, and to make them a more effective instrument for promoting both local and imperial interests. In their interim report,¹ published in 1937, the committee paid tribute to the value of the empire service, and to the usefulness of local broadcasting systems capable of relaying it, as well as of providing local programmes. They observed that no dependency could be expected to incur substantial and permanent loss on the equipment and maintenance of a broadcasting system designed solely or mainly for entertainment, though it would be justified as an instrument of administration and education. They examined in turn the possibilities of local wire broadcasting and of local wireless broadcasting, and noted that these were not mutually exclusive. In regard to the former, a circular dispatch was sent out by the Secretary of State in May 1935. With a small capital outlay, and a central receiving set capable of giving good reception of empire programmes, subscribers in a closely populated area can receive both overseas and local material at a cost of about £3 per annum, including hire of loud-speaker, and with no technical trouble to themselves. It is possible, moreover, to run feeder lines to sub-stations, as, for example, in the Gold Coast, where lines are run from central relay stations at Accra and Sekondi to Achimota and Takoradi respectively. Moreover, where telephone lines of sufficiently high quality exist, it may sometimes be possible to use them as a means of reaching remote areas.

Wireless broadcasting is, however, the only method of effectively covering a whole territory. It entails a heavy capital outlay and probably in the early years substantial recurring loss, though it might be possible to reduce this to some extent by the part-time use of radio-telephone transmitters. The committee found that 'at least some expenditure is demanded of colonial governments by way of experiment and investigation', and they recognized that if broadcasting is used by such governments for administrative and educational purposes, this carries with it the obligation to assume responsibility for reception sets and the supervision of listening centres. In order to assist governments to decide on future developments with expert assistance, the committee pre-

¹ *Broadcasting Services in the Colonies*, Colonial 139, 1937.

pared a questionnaire, relating both to technical and to programme problems, for circulation to colonial governments.

Local broadcasting services appear to have made more progress in British than in non-British territories. In Kenya European interest and enterprise have been responsible for a station at Nairobi now operated by Cable and Wireless, Ltd., which uses both medium and short wave-lengths and transmits both local and empire programmes; an experiment from this station is under consideration for special broadcast programmes in English and the vernacular to African listeners in the Kiambu native reserve, supervised by a committee representing the health, agricultural, and other services. Loud-speakers would be installed at district headquarters, and other centres such as bush schools, markets, or hospitals.

Sierra Leone, the Gold Coast, and Nigeria have established stations for the reception and re-transmission by wire broadcasting of empire programmes, as well as of local material. In Nigeria a radio distribution service has been established at Lagos for subscribers. The use of this system as a means of spreading elementary information about market-prices, control of pests and diseases, and other matters is under consideration by the Agricultural Department. In the Gold Coast a relay exchange of 2,000 subscribers, 80 per cent. of whom are Africans, exists at Accra. A weekly newsletter is broadcast from this station to other centres in the colony. Provision is being made for the extension of the broadcasting service to ten new centres. One of these was included at the request of a chief, the Omanhene of Winneba; another results from an agreement between the government and the Consolidated African Selection Trust, Ltd., whereby a re-diffusion service will operate at the company's mining camp at Akwatia. The company guarantees an annual payment of £350 in return for equipment and sixty loud-speakers, and makes available servicing assistance for the maintenance of power plant, both at Akwatia and at neighbouring villages which may subsequently be linked by wire. The training of Africans in broadcasting work has been attended with success, and it has been found possible to staff stations with Africans.

Broadcasting shows signs of development in French, Belgian, and Portuguese territories, both for official purposes and for listening to home programmes. The question of instructional broadcasting

from Dakar and Bamako is under consideration. The Radio Club at Brazzaville has established a small local broadcasting station on a wave-length of 24 metres.

Further local experiment appears to be needed in order to discover the most effective and economical methods of using broadcasting as an aid to education and improved contact between administrations and peoples. Experience has already shown that Africans take readily to wireless apparatus, and are capable of taking charge of it. It would seem to be of great importance that the results of all experiments in vernacular broadcasting, based on village or communal listening, should as far as possible be pooled and made available to all concerned; experiments in India, Palestine, and elsewhere may be no less worth studying for African purposes. Moreover, if broadcasting is to become an integral part of administrative machinery, it may be necessary to reconsider expenditure on normal services which involve propaganda and education, in order to make the most economical use of all available methods.

(d) *The Cinema*

In the cities and towns of the Union, and in similar communities elsewhere, cinemas have sprung up, as they have sprung up in urban centres all over the world, and are supplied with films which, as elsewhere, originate to an overwhelming degree in the United States of America. These present for the white community the same problems which the cinema presents elsewhere.¹ In the Union, censorship provisions were put into force by an Act passed in 1931, covering the subject-matter and display of films for the general public. The cinema of the European creates special problems in its effects upon the African,² similar to those created in India and other parts of the world where two cultures meet. Although varying degrees of censorship exist, and, in areas where there is a colour bar, Africans are not admitted to European cinemas, few suitable films are as yet available for African audiences.

In 1929 the Colonial Films Committee appointed by the then Secretary of State, Mr. Amery, examined the supply of suitable

¹ *The Film in National Life*, Commission on Educational and Cultural Films, 1932.

² H. Jelgerhuis-Swildens, op. cit.; G. L. Latham, *Means of Spreading Thought among the Natives*, Institut Colonial International, 1936.

films of entertainment, educational, or cultural value.¹ They accepted the view of the trade representatives that a supply of general films could best be secured through trade channels, and urged British film companies to turn their attention to the colonial market. Their recommendations included the setting up by the Film Group of the Federation of British Industries of a board, having the assistance of an advisory committee appointed by the government departments concerned, which should select films from those submitted and be responsible for distributing them through the appointed agents for each territory. It was believed that a substantial supply of films suitable for educational work already existed, and the committee recommended the appointment of an officer from the Colonial Education Service to undertake, in collaboration with the technical advisers of the Colonial Office, the tabulating of such films, and to keep colonial governments informed, as well as to receive from them particulars about the types of films required. The commercial organization suggested for the supply of general films could, it was thought, undertake also the distribution of educational films.

The Committee believed that the problem of censorship could be adequately dealt with by local boards with substantial powers and status. But it was urged that in tropical Africa the necessity of preventing the more demoralizing western films from reaching African audiences was so great, that local action would require the support of a strong central board in London. It was recommended that quota facilities should be given to cultural films, that all cinematograph displays should be regulated, as well as posters of films, and that local safeguards should be taken against the making of unsuitable films in Africa, or the performance of dangerous acts for film purposes.

The Committee's suggestions have been almost wholly without result. Their expectations that the British film industry would meet the needs of the colonies or develop the colonial market proved unduly optimistic. In view of the poor commercial return it was indeed unlikely that the British film industry, faced with difficulties at home, could have embarked upon colonial activity, and in the light of experience subsequently gained, it is improbable

¹ Cmd. 3630, 1930.

that they possessed enough knowledge of colonial needs to produce acceptable films. The appointment of an officer of the Education Service to centralize and distribute information about suitable films was not proceeded with, and no central censorship committee was established in London. It is true, however, that local boards have been set up by ordinance in all British colonial dependencies in which no provisions for censorship already existed. The personnel of the committees varies from small groups of official members, to larger groups including missionaries, wives of officials, local residents, &c. Their responsibilities cover the display of all posters as well as of all films, and include the right to cut as well as to ban or license. In most territories permission is also required before films may be made, as a precaution against the filming of unsuitable subjects or of scenes involving danger to life. Notwithstanding the lack of outside interest, considerable use of the cinema for educational and instructional purposes has been made through the local enterprise of administrative, educational, and technical departments in Africa. In Nigeria, for example, a fully equipped lorry for health propaganda purposes has been obtained by means of a grant from the Colonial Development Fund. The greater part of the money is being spent on the local production of films and on the upkeep of apparatus.

In 1933 the Department of Social and Industrial Research of the International Missionary Council, recognizing the few facilities for recreation which civilization was leaving to the African, and the widening gap in outlook between industrialized workers and their rural background, considered the possibility of research in the production of cultural films. This project was eventually launched as the Bantu Educational Kinema Experiment.¹ It was financed in the first instance by the Carnegie Corporation of New York, and was carried out with the co-operation of the British Colonial Office, the East African governments, the British Film Institute, the International Institute of African Languages and Cultures, and others. The report,² published in 1937, describes the thirty-five films made on the spot, with Africans as performers, and commentaries in several vernaculars. It outlines a scheme, with costs, for local film-

¹ See Chap. XVI, p. 1110.

² L. A. Notcutt and G. C. Latham, *The African and the Cinema*, 1937.

production units, sound-recording units, and one central organization in London to serve all territories concerned in the Empire. A group of six East African territories would, it was expected, secure some 70,000 feet of 16-millimetre film annually, at a total cost of £5,200 capital expenditure, and an annual recurring cost of £14,300. It is believed, however, that within a few years such a scheme would be almost self-supporting.

The experiment demonstrated the ability of the African both to act for films and to appreciate them when made, even to the extent of paying to see them. It taught the staff concerned that suitable subject-matter, conceived as far as possible from the African's standpoint, was more important than technical excellence, and that it was possible to demonstrate new methods of health and agriculture by means of films. The report shows also the opening awaiting entertainment films designed for a new African public. At the same time, the need for further research and experiment to discover more precisely the types of films wanted, and the ideas which certain scenes or stories suggest to African as distinct from European minds, was made apparent. In this connexion it may be noted that an experiment in Tanganyika is now being considered by an Administrative Officer and an artist, to study the reaction of village Africans to simple pictures; it is, for example, by no means certain that illustrations in school books, as well as still or moving pictures, always convey the ideas or the morals intended by those who display them.

In South Africa a Film Division of the National Bureau of Educational and Social Research was inaugurated in October 1936. A Film Advisory Board was at the same time established by the Minister of Education, representing fifty appropriate organizations and interests. The use of the cinema as a means of interpreting European civilization to Africans is one of the subjects with which the Board is concerned.

Although North Africa is outside the scope of this Survey, it is worth noting that in Algiers the Post Office is used as a distributing agency for films from a central film library, providing both educational and recreational films. The French government has encouraged local notables to provide cinematograph outfits and has afforded some help in certain cases.

In French West Africa and in French Equatorial Africa the cinema is naturally less developed. Regulations have been in force since 1934 for the control, through local commissions analogous to those in British territories, of film displays and of the making of films. Commercial films reach a considerable public in French West Africa, and admission to cinemas is open to all. A beginning has been made with educational films, especially in connexion with the campaign against sleeping sickness. In the Belgian Congo the system of control in force is similar to that in the French territories.

The use of cultural agencies in the education of adult Africans suggests a wider problem in British territories. In the more advanced areas, especially in West Africa, groups of educated Africans are showing the first signs of nationalist feeling, and there is evidence in journalistic and political activities of a strain of bitterness due, perhaps, to the apparent contradiction between our political liberalism and our social exclusiveness. The groups may at present be small, but their influence is one which may increase considerably with the advance of education. Social contact, which might do much to counteract ill-informed criticism and undesirable influences, hardly exists in territories where relations between the races, however friendly, are mainly official or that of employer and employee. The French have been more successful not only in spreading knowledge among the metropolitan population of the arts and cultures of their African dependencies, but also in associating educated Africans with French aims; their methods, involving direct government action, may be unsuited to British ideas, but the provision of facilities in British territories for the study of British political and social aims, and for the exchange of ideas between the two races, is a matter which appears to need more consideration than has been given to it in the past.

X. STATISTICAL SUMMARY SHOWING SCHOOL POPULATION AND EXPENDITURE

The reservations and qualifications which it is necessary to make in connexion with any educational statistics, particularly in Africa, may seem to invalidate all attempts to show comparisons by this means. The subject has been closely considered by the Colonial Office Advisory Committee on Education in the Colonies,

which has reached the conclusion that no figures so far available have great statistical value, owing to the diversity of methods employed in their compilation. As a result of their study, instructions have been issued by the Secretary of State prescribing a form in which the desired statistics shall in future be presented. The Commission on Higher Education in East Africa¹ likewise took the view that no comparative statistics could usefully be shown in its report. Notwithstanding these conclusions, an attempt is here made to summarize educational expenditure, and the percentages of native pupils in different schools, in tabular form, in the hope that these figures may be of interest and value. It cannot be too strongly emphasized, however, that the tables should be carefully studied in the light of the qualifications which follow, and that the figures should not be used without these important reservations.

The variety of statistical methods adopted in the different territories is so great as to make it difficult to institute any effective comparison, either in respect of the standard of education attained, or of the expenditure incurred. It is, for instance, difficult to secure any satisfactory basis for comparing percentages of native pupils in different school years owing to the variety of nomenclature adopted. In the Union the native schools follow the classification for European schools, the classes in the primary stage including two sub-standards and six standards. Elsewhere terms are found such as sub-grade, elementary, lower middle, upper middle, intermediate, central, and junior secondary; and enumeration of schools so classified would convey little unless numbers were given of the pupils studying in the different standards included in each school. The statistics in French and Belgian territories follow a different system and are not comparable with those of the British areas. Some attempt has therefore been made to make a classification of pupils in a few British territories according to standards, on the assumption that each standard corresponds with a year's work. Such a calculation is admittedly arbitrary and is offered subject to all necessary reserve. The figures for Nigeria are in particular doubtful, as classification figures are available only for the Southern Provinces.

¹ *Report*, op. cit., Colonial 142, 1937.

In regard to the number of pupils recorded, it must be noted that the figures for aided schools include a considerable number in respect of which no aid is given, for where state aid takes the form of block grants, it is not possible to say to which schools the block grant given to a mission is applied; it has, however, seemed preferable to include all the children who are recorded as in school, in order to obtain comparative figures of government expenditure. In Nigeria the children in Koran schools have been included, though they cannot be brought into comparison with pupils attending schools of a different type. It has also to be remembered that there are still many areas in which the smaller bush schools are concerned mainly with religious teaching.

Difficulties of comparison are no less serious in regard to expenditure. The very considerable educational expenditure of missionary bodies is not included, since it is not usually possible to isolate such expenditure from general missionary finance. The missions do not, as a rule, distinguish expenditure on education from that on other activities, and the growing tendency to make local missions as far as possible self-supporting leaves a large field of expenditure which is not brought into the accounts of home bodies. The proportion of expenditure met from mission funds, local receipts, and government grants respectively may be illustrated from the accounts of one of the missions working in Uganda. The home mission grant in 1935 was £17,987, the native contribution £13,333, school fees £17,667, and government grant £22,420. There is, moreover, a difficulty in connexion with fees. When the Education Department itself collects fees, these are credited to general revenue. Where fees pass through the missionary bodies, they do not appear as part of government educational finance.

Again, the expenditure figures shown in Table XI as government expenditure do not include the sums spent on education from native levies or native administrations. In Nigeria and Tanganyika native administrations are responsible for disbursing considerable sums, which are allocations from taxation revenue, on education. In the former territory, some thirty schools have recently been transferred from the central government to the native administrations. In Kenya the natives themselves have

taken the initiative in raising funds for education by means of special taxation imposed by the Local Native Councils. The bulk of the sums so raised has been expended in erecting schools which are administered by the government; assistance has also been given to mission schools and to private schools directly managed by natives. It should also be made clear that in South Africa expenditure on 'child welfare' has not been brought into account.

There is no uniformity of definition of educational expenditure. The figures given in column 2 are based upon the expenditure of the Education Departments. It should be noted that in some territories these figures include sums spent on vocational and technical education, while in others such education may be undertaken by the technical departments and will therefore not figure in the educational budgets.

Practice and circumstances differ also in regard to capital expenditure. One territory may build schools from loan funds, bearing an annual interest charge which would not, however, be debited to educational expenditure. Another territory may build schools out of revenue, and their cost may appear in the education vote. Similarly, in regard to maintenance, this is in most cases met from the Public Works Department vote, but there are exceptions even to this. It should be stated here that in the case of the South African education services expenditure in respect of loan charges on education buildings and in respect of pensions has been omitted, as these charges are not included under education expenditure in the colonies or mandated territories.

Finally, the division of education expenditure between Europeans, Asiatics, and Africans depends upon allocations of common expenditure, e.g. administration, inspectorate, equipment, which are in many cases arbitrary.

These are, in the main, the variations in financial administration which have to be borne in mind when the figures in Table XI are examined. In spite of this wide diversity of practice, the table does, it is suggested, give a fair indication of the funds expended by the different territories for the service which they regard as directly educational. It also gives an indication of the distribution of those funds among the pupils of different races in those territories where expenditure admits of racial analysis.

TABLE X
PERCENTAGES OF NATIVE PUPILS IN DIFFERENT SCHOOL YEARS

	Sub-standards	Standard I	Standard II	Standard III	Standard IV	Standard V	Standard VI	Above Standard VI
Cape of Good Hope (1935)	55.4	13.9	10.7	8.4	5.2	3.4	2.6	0.4
Natal (1935)	58.6	13.9	9.1	6.9	5.1	3.1	2.2	1.1
Transvaal ¹ (1935)	62.6	11.2	8.8	6.8	5.1	3.1	2.3	0.1
Orange Free State (1935)	57.2	14.8	9.4	7.3	5.0	3.1	2.4	0.8
Bechuanaland (1934)	73.5	9.8	7.2	5.0	2.5	1.2	0.8	—
Southern Rhodesia (1935)	88.0	6.2	2.8	1.5	0.8	0.4	0.2	0.1
Nyasaland (1936)		94.8			5.1			0.1
Uganda (1936)		97.0			2.9		—	0.1
Kenya (1936)		96.8			3.0		—	0.2
Nigeria ² (1935)	61.9	11.8	8.1	6.0	4.7	3.4	3.0	1.1
Sierra Leone ³ (1935)	51.2	12.5	9.7	8.4	6.0	4.7	2.1	5.4

Notes. ¹ Excludes Government School (1,250 pupils).

² Omits Northern Nigeria.

³ Omits unassisted Protectorate Schools.
General Note. Unassisted schools omitted in South African provinces, and in Southern Rhodesia and partly in Sierra Leone.

CHAPTER XIX

THE EXTERNAL ASPECT OF AFRICAN ECONOMIC DEVELOPMENT¹

I. THE HISTORICAL BACKGROUND

THE first economic contacts of European countries with Africa, apart from the Mediterranean coast, sprang almost entirely from the slave trade and the trade with the East Indies. When Columbus and his successors first discovered the Americas, and when Bartholomew Diaz first rounded the Cape of Storms, Africa south of the northern tropic was virtually unknown.

Trade in African slaves had its origins as early as the days of Imperial Rome. It was continued through the period of the Moslem domination of North Africa, and African slaves were common in Arabia, Turkey, Persia, and even India, as well as along the northern coast of the continent. The trade received a new impulse with the sudden demand for labour in the Americas in the early years of the sixteenth century; Spanish, Flemish, and Genoese merchants were all concerned in the business, and after 1560 the English began to take their part. At first the slaves came principally from the rivers between Cape Verde and the Niger, but later, as the demand grew, the territories as far south as Angola were exploited. By the time that Vasco da Gama had consolidated the first achievements of Diaz by sailing round the Cape, up the East Coast to Moçambique and Melinde, and thence across the Indian Ocean to Calicut, the Portuguese had explored more or less thoroughly the West Coast, and had established a series of forts and stations from Cape Verde to the Congo. Once the way to India was known, these stations were quickly extended southwards and up the East Coast also. Here the Portuguese interest in African trade received an added stimulus from the search for gold.²

During the following three centuries control of the Indian route passed from the Portuguese to the Spanish, with the annexation of Portugal in 1580, to the Dutch in 1620, and, after the

¹ This chapter, and that which follows, were largely drafted by Mr. E. A. G. Robinson, Fellow of Sidney Sussex College, Cambridge.

² See Chap. XXII, pp. 1487 ff.

vicissitudes of the Napoleonic wars, with the decay of the Dutch East India Company, to the British in 1806.

During these three centuries colonization had been spasmodic and uneven, and limited in the main to small areas of cultivation in the immediate neighbourhood of the coastal forts. Only the Dutch settlements in South Africa penetrated inland; they extended by the end of the eighteenth century no more than one hundred and fifty miles from the southern coast, and were confined to the fertile territories below the escarpment of the Karoo. The relations of these Dutch colonists with the impecunious administration of the Dutch East India Company at the Cape had always been strained. Its supersession by the British increased the friction, and the arrival in 1820 of fourteen shiploads of British immigrants added to the existing difficulties and complaints. Finally, after the emancipation of the slaves, the first great trek northward took place in 1836, when ten thousand *voor-trekkers* attempted to remove themselves from the vexations of British rule.¹

The penetration of other parts of Africa took a more leisurely course. During the last three and a half centuries parts of the interior had been explored and mapped by some few scores of explorers of all nations. But a school atlas of 1850 would show an interior to the continent scarcely as well surveyed as is the Antarctic to-day. Gradually the journeys of such travellers as Mungo Park, Richard Burton, José de Lacerda, Heinrich Barth, David Livingstone, Henry Stanley, and many others of lesser fame, and of the missionaries (who, from the time of the Jesuits who first accompanied the Portuguese, penetrated farther and stayed longer than all save the most adventurous of the explorers), filled in these gaps and made the resources of the country known.

The knowledge thus gained spurred Leopold of Belgium to carve out for himself what was virtually a vast private estate on the upper Congo. The probability of a similar extension of European influence north of the Zambesi brought the Powers together in the Berlin Conference of 1884-5, where it was sought to bring order into the scramble for territory. It was agreed that claims for territory must be notified to the other signatory powers and that they must be supported by evidence of occupation. But since

¹ See Chap. V, p. 130.

occupation, in the sense of the presence of settlers, traders, mission stations, government offices, might not be immediately effective, 'spheres of influence' were to be recognized. Thus, outside the limits of the four republics in the south, Africa remained until the last years of the nineteenth century essentially a 'continent of outposts'.

So soon as the division of territories was completed, some attempt not only at political but also at economic penetration and development was begun. But in the initial stages progress was slow and the difficulties encountered were many. Distances were great and the supply of labour scanty. The richest natural resources may have little economic value if they are many hundreds of miles distant from ports and places of consumption, and if plentiful labour is not available for their exploitation, and the resources of Africa, great as they undoubtedly are, have suffered from both of these handicaps.

In such conditions it was not easy to secure from outside sources the capital that was necessary for economic development, or to create a surplus of exports out of which interest payments on that capital could be met. This difficulty was overcome in South Africa by the discovery of diamonds in 1866, which provided a valuable export unaffected by the high cost of transport and requiring little capital for its immediate exploitation.¹ The foreign capital employed in the industry has probably never exceeded £20,000,000; the majority came from the profits of the industry itself. Already by 1882 the annual value of diamond exports had reached approximately £4,000,000, twice the amount of all other exports before the discovery of diamonds.

The immediate effects were significant. South Africa had hitherto depended primarily on the proceeds of an extensive and casual agriculture. The community was poor and not very numerous. In 1865 the total European population of the Cape Colony did not exceed 181,000. The taxable resources for internal development were slight, and in bad years virtually disappeared. Moreover, foreign capital, even if it could be attracted, could do little to remedy the difficulties of the colonists. Low-rated agricultural exports and the few imports that such a community could afford would serve scarcely to cover the operation and depreciation costs of rail-

¹ See Chap. XXII, pp. 1509 ff.

ways, quite apart from the heavy interest charges. Indeed, when the diamond discoveries were made, no more than fifty-eight miles of railway existed in Cape colony. The first extensions, made possible by mineral discoveries, joined Kimberley with the Cape and with Port Elizabeth and East London.¹ Moreover, when gold began to be mined on the Rand in 1886, the capital for its exploitation could be readily obtained, both from those who had made profits in diamonds and from foreign investors who were already familiar with Africa as a place of investment and with the personalities of the leading figures in the diamond world, now associated also in the gold-mining enterprises. The capital for railway extensions could be borrowed on reasonably easy terms. Finally, the diamond diggings served to demonstrate the field in which African labour could collaborate with European technique and European capital to the greatest profit. In an extensive system of agriculture cheap native labour is of relatively small advantage, and did not in Africa suffice to overcome the handicap of distance, high transport costs, and lack of facilities. In mining, the close supervision of more routine tasks has increased the relative efficiency of native labour, and transport costs have proved less of an impediment.

In the territories economically less fortunate than the Cape, development was slower and more difficult, and in many cases took the form of exploitation by powerful companies, furnished usually with some measure of monopoly power, and armed often with responsibilities also for political administration. Their dual position enabled them, however, to take a wider view than could either a private merchant or a government debarred from trading activities, of what might be regarded as profitable expenditure upon long-range developments. They could set their gain from the expansion of native or general trade against increased costs of administration, or in later days the appreciation of land values or the profits of mineral exploitations, against the probable losses of railway operations.

Companies of merchant adventurers to the West Coast of Africa had received charters from Queen Elizabeth. The Royal African Company had enjoyed a charter from Charles II, granting it a monopoly of the trade of the whole coast from Morocco to the Cape

¹ See Chap. XXIII, p. 1565.

Colony. These earlier monopolies had in most cases been suppressed, or had fallen into abeyance, during the anti-monopolist agitations at the close of the seventeenth century, though powerful associations of merchants in several instances continued to draw subsidies and to administer the forts and trading stations. The principle of development through the agency of companies was, however, widely revived during the years preceding and following the Berlin Convention. In British territories the Royal Niger Company, the Imperial East Africa Company, the Chartered Company of Nyasaland, and Rhodes' British South Africa Chartered Company all served to expand British trade and influence, despite the apathy, which in the earlier years at least grew sometimes into antagonism, of the government at home. In the Belgian territories the *Compagnie du Congo pour le Commerce et l'Industrie* was founded in 1886, and established a series of subsidiaries for the development of particular areas or activities. In French Equatorial Africa an epoch of concessions to companies was inaugurated in 1899. In the Portuguese possessions the Moçambique Company and the Company of Mossamédès, amongst others, possessed almost unlimited powers over a wide area. In the German territories the *Deutsche Ostafrikanische Gesellschaft* and the privileged companies in South-West Africa and in the North and South Cameroons were established upon similar lines.

The companies differed much in size, in the responsibilities imposed upon them, and in the efficiency with which they carried out their varied tasks. Many of them at the end of a comparatively short period found themselves obliged either to cease operations entirely or considerably to curtail their activities. An exaggerated belief in the natural riches of the territories, and an entire misconception of the difficulties of their exploitation, had led in some cases, though not in all, to the loss of vast sums in misguided attempts to reap quickly without sowing.¹

In the territories unsuited to European settlement the earliest attempts to develop trade sometimes involved the destructive spoliation of the resources of the colony. Rubber or forest timber was exhausted without proper replacement; accumulations of ivory were for a period obtained by exchange for cheap imports.

¹ See, for example, Chap. XII, p. 787.

But such a policy of exploitation could not continue indefinitely. Once the realities of the situation were understood, capital was less easily attracted. But the creation of expensive public works, in particular of harbour works and of railway facilities, was more clearly seen to be an essential condition to the effective *mise-en-valeur* of the various territories. The Niger and the Congo and their tributaries have always provided important roads into the interior, but both required to be supplemented by railways, and the Congo to be connected from a point above the rapids to suitable points below.¹

As knowledge extended it became increasingly apparent that African territories could be developed only if capital construction were undertaken of a type which seemed likely to yield a return too uncertain and too distant to justify investment even by a chartered company. Moreover, experience increasingly showed the difficulties of reconciling the responsibilities of administration with the interests of shareholders, and of demarcating justifiable administrative compulsion from forced labour for the purpose of profit-making. In consequence the first decade of the twentieth century saw in many territories an attempt to recover the earlier grants of concessions and to separate more distinctly the functions of trading and of government. French, Belgian, and German policy early moved in this direction. In British territories, from 1900, when Nigeria became a protectorate, the administration has in one case after another been transferred to the Crown.

In recent years, however, as will be shown in the next chapter, there has been some partial return to the earlier policy with regard to concessions. As governments have become more strongly established and more widely spread, they have been less liable to domination by powerful concessionaires, and the merits as well as the defects of such companies have come to be recognized. The large company can often afford an organization to control the conditions and welfare of its native employees that would be beyond the reach of the best-intentioned small employer.² Its operations can be more easily controlled than those of a multitude of small undertakings. Belgian observers are not slow to point to the marked difference of conditions at the Lupa and Kilo-Moto gold fields,

See Chap. XXIII, pp. 1591 ff.

² See Chap. XI, pp. 672 ff.

both engaged in working alluvial, but the latter under the management of a well-organized company in which the state retains an interest.¹ The company enterprise, again, can often afford to take a longer view of the advantages of training and educating workers and of developing new types of industry or new forms of agricultural produce.

As economic development proceeded, wide differences began to appear between the various territories. Where, as in the Union and Southern Rhodesia, a territory enjoyed both the advantages of a climate suited to white settlement and minerals ready to be worked, development came quickly. Where, as in Kenya, settlement was possible, but minerals were at first scarce or unprofitable, development was slower and more precarious. Where, again, as in Nigeria and the Gold Coast, the possibility of cultivating export crops existed, but white settlement was impossible, economic development took a substantially different form. Where, finally, as in French Equatorial Africa, in parts of the Belgian and Portuguese colonies, and of Northern Rhodesia and Tanganyika, none of these advantages existed, an economic backwater remained, and native life followed its traditional forms, with little change save that consequent upon the imposition of peace.

During the first two decades of the twentieth century the problem of the end and of the methods of colonial economic administrations came by degrees to be more clearly formulated, and conservation and development gradually became the chief characteristics of economic activity.

II. THE DEVELOPMENT OF AFRICA BY FOREIGN CAPITAL

So far as concerns the actual stages of economic penetration, railway building took the first place, apart from early attempts at the exploitation of minerals. As a consequence of the widespread transfer of responsibilities from the earlier companies to administrations directly under the control of the imperial powers, the task of railway construction and operation passed increasingly into the hands of the various governments. The latter could sometimes secure an economy through departmental construction. More frequently the political urgency of speedy completion was the

¹ See Chap. XI, p. 650, and Chap. XXII, p. 1507.

primary argument for that course. But, since the main reason for government operation was the lack of a sufficient prospective profit to attract the private investor, the inter-relations of railway and government finances have in many colonies been complicated. It has rarely been possible, save where a profitable mineral traffic has been available, for railways to earn a normal return on their capital. The profits of the South African Railways have been secured largely from the service of the gold-mining community of the Rand. The Rhodesia-Katanga copper mines, with four outlets to the sea, at Beira and Dar-es-Salaam to the east, and at Matadi and Lobito Bay to the west, have brought from time to time relative prosperity to whichever route was fortunate enough to carry a large volume of the output.

It is clear that the development of less accessible areas, whether from the point of view of the raising of native standards of life, or from that of European colonization, or again from that of the creation of raw material supplies, can only be solved if cheap transport facilities are first provided; but further railway construction¹ is not likely to be undertaken on any large scale, unless a distinction can be drawn between strictly commercial operations and extensions which are for development purposes, and which, however wise in the light of long-run considerations, cannot be expected to bring an early return to the private investor.

The important part that railway construction has played in the opening up of African trade can best be indicated by its share in the total investment of capital in African enterprises south of the Sahara. In the course of a study which is being published as an accompaniment to this Survey, Professor Frankel has made an estimate of the total of foreign capital that has been employed in the development of such African undertakings down to the close of 1934.² According to his calculations, out of a total investment of about £1,222,000,000 no less than £384,000,000 was required for investment in railways. Of the total loans raised by the governments of British territories in Africa, as much as 75 per cent. was for railway purposes. The following table shows the distribution of this investment according to territories.

¹ See Chap. XXIII, p. 1608.

² S. H. Frankel, *Capital Investment in Africa*, 1938, chap. v, p. 419.

TABLE XII

Railway Systems in Africa. Capital Expenditure to 1934¹

	£000,000
South Africa	167
N. and S. Rhodesia	26
Nyasaland ²	5
Tanganyika	5
Kenya and Uganda	23
Sudan	11
Nigeria	23
Gold Coast	9
Sierra Leone	2
Total British	271
French Possessions	32
Belgian Possessions	38
Portuguese Possessions	22
Former German Possessions	21
Total Foreign	113
Total British and Foreign	<u>384</u>

Professor Frankel, in estimating the total investment of foreign capital in African territories, has based his calculations mainly upon the figures of new capital issues published from time to time by the *Economist*.³ These figures exclude non-listed capital, invested directly by immigrants in agriculture or in small mining or commercial enterprises, and also such foreign capital as is employed in Africa by firms whose main operations are elsewhere, and whose capital is not therefore classified as raised for African purposes. For this non-listed capital a somewhat arbitrary provision has had to be made.

He has estimated that a total of about £1,222,000,000 had been invested from abroad up to the end of 1936. Of this, about £546,000,000 took the form of loans and grants to governments;

¹ Ibid.

² The Beira and Beira Junction Railways, and the Trans-Zambesi Railways, having been built mainly with British capital, have been included with the Rhodesia and Nyasaland railways respectively, of which they in effect form extensions to the sea-coast.

³ Professor Frankel's figures, following the practice of the *Economist*, are designed to show only the cash subscription and not the nominal capital. Where an issue has been for the purpose of buying out an existing undertaking he has eliminated vendors' shares where they led to little or no inflow of capital from abroad, but where they have been largely sold to foreign holders they have been included. So far as possible double counting through the inclusion of banking, finance, and holding or insurance companies as well as their subsidiary operating companies, has been eliminated.

about £581,000,000 took the form of 'private listed capital', the public issues, that is, of companies; about £95,000,000 was the estimated total of non-listed capital. This last figure has been obtained merely by estimating for each territory the ratio (varying from 5 per cent. to 15 per cent.) of non-listed to listed capital. There is a considerable margin of probable error in these estimates, but since the figure of non-listed capital is small relatively to the total the added margin of error in the final figure is not great.

Of the total of £1,222,000,000, about £523,000,000 is the estimated share of the Union of South Africa, which is 42·81 per cent. of the investment in all territories, and 55·54 per cent. of that in British territories. Of other British territories, the most important fields of investment have been: the Rhodesias, which have taken about £102,000,000, Nigeria, £75,000,000, Tanganyika, £52,000,000, Kenya and Uganda, £46,000,000, the Sudan, £43,000,000, the Gold Coast, £35,000,000, and South-West Africa, £32,000,000. The total investment in all British territories is estimated to have been some £941,000,000 to the end of 1936, which is about 77 per cent. of the whole.

In non-British territories the greatest investment has been in the Belgian Congo, where it is estimated to have been £143,000,000. In the French territories the estimated total is £70,000,000, of which about £30,000,000 is in French West Africa, and £21,000,000 in French Equatorial Africa. The estimated investment in the Portuguese territories is about £67,000,000, divided fairly equally between Angola and Moçambique. Thus in the Belgian territories there is about 11·73 per cent., in the French 5·76 per cent., and in the Portuguese 5·46 per cent. of all the capital invested.

The meaning of these figures, so far as they concern economic development, can most clearly be seen by calculating the investment per head of population. It must be remembered that they represent only the foreign investment, and in the more highly developed territories there is a very considerable added local investment, both of private capital and of public money, spent upon capital improvements. The total capital that has brought Africa to its present stage of development, or the capital that would be needed to raise a territory from its present to a higher stage of development, is thus very substantially greater than is indicated

by these figures of capital imported. The foreign investment in the Union amounts to about £55·8 per head of total population, European, Asiatic, coloured, and native. It is about £38·4 per head in the Rhodesias, about £8·1 per head in British East Africa, and about £4·8 in British West Africa. In Nigeria it is only £3·9 per head. It is about £13·0 in the Belgian Congo. In Angola and Moçambique it is about £9·8 per head, though the railway and port developments of both these territories serve much more than the local populations. It is lowest in the French colonies, about £3·3. In French West Africa it is no more than £2·1 per head.

Three main facts emerge from Professor Frankel's analysis. First, the Union, with its more highly developed modern economy, has absorbed a very large part of all the capital that has gone to Africa. Second, it is the highly mineralized territories which have received the greater part of the capital; in the others the capital per head remains in most cases comparatively small. Third, investment controlled by governments has been a very important part of the whole, about 44·72 per cent. for all these territories together, and about 47·68 per cent. for the British territories. The proportion tends to be lowest in the more highly mineralized territories, where there has been extensive borrowing for mining undertakings, and highest in those territories where railway construction controlled by the government has been almost the only important form of economic development. In the Union 'public listed capital' was, according to Professor Frankel's estimate, 42·85 per cent. of the whole. In the Rhodesias, where during the British South Africa Company's rule private enterprise was naturally an important part of the whole, it was 38·68 per cent. of all capital. In the Gold Coast it was 38·13 per cent., and in Nigeria 46·24 per cent., mainly as a consequence of the large quantities of capital employed by the big trading companies. On the other hand, in Nyasaland it was 84·79 per cent., in the Sudan 83·37 per cent., in Sierra Leone 72·95 per cent., in Kenya and Uganda 68·36 per cent., and in Tanganyika 60·14 per cent. In the French territories the proportion is in general close to the latter group. It was 71·72 per cent. in Equatorial Africa, 60·71 per cent. in Togo and the Cameroons, and 54·15 per cent. in French West Africa. In the Portuguese colonies, where British private capital had provided a large part of the

whole, it was no more than 27.92 per cent. In the Belgian Congo and Ruanda-Urundi the very great investment in mining, and the construction of railways by private capital, have reduced the share of 'public listed capital' to 25.01 per cent. of the whole. As has been remarked elsewhere¹ the state has a large financial interest in many of the more important industrial and commercial undertakings, but this is not fully explained by the figures of 'public listed capital'. The nature of the holding is best illustrated by the details given in Chapter XXII regarding the constitution of the *Union Minière* and Kilo-Moto companies.²

The 'public listed capital' takes in the British colonial territories three forms: loans, grants-in-aid, and grants from the Colonial Development Fund. It has also to be remembered that in the West African colonies, and to some extent elsewhere, the military garrison was for a considerable time paid directly from England and the cost did not appear in colonial accounts. Of a total of £449,000,000 for the Union and British colonies, some £394,000,000 are loans, of which £224,000,000 are to the Union,³ and £36,000,000 to Southern Rhodesia. In addition there have been grants-in-aid, amounting in all to £52,000,000. This figure includes, however, the German grants made before the War to Tanganyika and South-West Africa. If these are excluded, the total of grants to British territories is no more than £27,000,000. The bulk of these grants was, of course, made in the early years before the territories could be brought into a position where revenue balanced expenditure. Of the remaining territories, the Anglo-Egyptian Sudan has received the most, £10,800,000. Nigeria (including an appropriation for the compensation of the Niger Company) has received £5,700,000. No other territory has received over £3,000,000. Since 1929 grants for new colonial developments have been made from the Colonial Development Fund.⁴ Its grants to African territories amounted by

¹ See Chap. XI, p. 645.

² See pp. 1506-8.

³ See S. H. Frankel, *op. cit.*, Table 28, p. 158.

⁴ Under the Colonial Development Act, 1929, an annual sum not exceeding £1,000,000, and in practice varying usually between £400,000 and £900,000 according to the demands upon the fund, is voted by parliament. Free grants or loans may be made from the fund to colonies not possessing responsible government, protectorates and mandates, for the purpose of aiding and developing agriculture and industry in their territories, and promoting commerce with and industry in the United Kingdom.

the end of 1936 to approximately £3,000,000. Of this, about a half has gone to East Africa, including important grants to Nyasaland for railway and bridge works. Thus the total of the British grants from public funds is no more than some £30,000,000.

It is greatly to the credit of British administration that it so quickly brought these African territories to a position of financial independence. But it has sometimes meant that developments which could provide no attraction to private enterprise, and could not sustain the relatively high interest rates at which these governments have been obliged to borrow, have necessarily been long postponed or seriously curtailed. If at any time the existence of an unemployment problem requires the examination of methods of providing work in Great Britain, the possibility of further grants to assist African governments to purchase railway, bridging, or other capital equipment might perhaps be considered with advantage to both parties.

Of the 'public listed capital' in British territories over half has been invested in railways. The total investment in these is, as was shown above, about £271,000,000. Of the 'private listed capital' a large share has gone to mining. In the Union the diamond mines have probably taken some £20,000,000 of foreign capital. The gold mines have provided a much larger source of demand. Up to 1932 they had absorbed about £148,000,000 of invested capital, and about £63,000,000 of reinvested profits.¹ Of this investment, about £120,000,000 came initially from abroad. Since 1932 there has probably been about £24,000,000 of further foreign investment in gold mines. Thus of the £251,000,000 of 'private listed capital' in the Union, roughly two-thirds has gone to finance

The particular means specified in the Act include: encouragement to the adoption of improved machinery and equipment for cultivation or the preparation of agricultural produce for the market; the improvement of internal transport; the construction and improvement of harbours; the development and improvement of fisheries; forestry; surveys; the reclamation, drainage, and irrigation of land; improvement of water supplies and water power; electricity supply; promoting the development of minerals; scientific research and experiment likely to assist agriculture or industry; public health; assistance for not more than ten years in meeting the interest charges upon loans raised for certain purposes. The fund is administered by a committee of seven members. The total assistance approved to British colonies in all parts of the world was £7,284,682 at March 31, 1938, of which £3,025,168 was loans and £4,259,514 grants. Of this about 55 per cent. had gone to African territories.

¹ S. H. Frankel, *op. cit.*, chap. v, p. 89.

mining enterprises. In the Rhodesias probably about £47,000,000 has been used for this purpose. There were, it is true, large issues of nominal capital in Southern Rhodesia in the early years of its development—the figure was about £44,500,000 before 1904. But of this barely a quarter had been subscribed in cash. The great copper developments of the last decade have brought nearly £25,000,000 of foreign capital to Northern Rhodesia.

Of the other British territories, only Nigeria, the Gold Coast, Sierra Leone, Kenya, Tanganyika, and South-West Africa have important mining interests. In none of these has the investment been on a scale comparable with that of the Union and the Rhodesias. In Kenya, Tanganyika, and South-West Africa much of the development has been undertaken by individual prospectors with little financial backing from abroad. Of the £43,000,000 of nominal capital concerned in the 1904 gold-mining boom in the Gold Coast, only a small fraction found its way to the territory in the form of actual investment. The total mining investment in all these territories is probably in the neighbourhood of £15,000,000 to £20,000,000.

Of the non-British territories, the Belgian Congo has been very much the most important field of mining investment. The capital invested for this purpose was probably already about £13,000,000 at the outbreak of the War.¹ Since then there has been a further investment, made at various times, and at various stages in the depreciation of the franc, which may be valued very approximately at another £17,000,000, making about £30,000,000 in all.

Thus in round figures the mining investment in Africa south of the Sahara may be put at £260,000,000, of which just about two-thirds is that of the Union. This represents a little more than one-fifth of the total investment, and more than two-fifths of the 'private listed capital' invested.

This investment, important as it has been in bringing Africa to her present stage of economic growth, is yet small in comparison with the vast amounts of capital which have through the centuries been invested in the development of the older countries and more particularly of the European countries. The present value of the capital investments in Great Britain may be very roughly put at

¹ S. H. Frankel, *op. cit.*, chap. v, p. 167.

£14,000,000,000, and that figure, though it includes an estimate of the value of roads and other social capital, nevertheless scarcely reflects the vast sums which have been sunk in many forms of public and private improvements and continue even after a long lapse of time to increase the amenities of life.

No reliable figures exist which will show the return on the total capital invested in Africa. The diamond mines have paid dividends between 1886 and 1934 exceeding £80,000,000 on an investment of some £20,000,000.¹ The Rand gold mines, according to a calculation of Professor Frankel, have not given any correspondingly high rate of return. For the years 1886-1932 they yielded an average of approximately 4.1 per cent. upon the capital invested. But the sheer magnitude of the investment has secured that a large total of dividends has been distributed to foreign investors.² The earnings of the chartered companies, on the other hand, have never been spectacular, and when the investments which were wholly or partially lost are taken into account the average of earnings has almost certainly been lower than would again induce the investors to embark their capital.

As regards the rate of interest on government loans, for a fully satisfactory analysis both the terms of the original issue and of the ultimate repayment would need to be taken into account. Such an analysis would require the detailed examination of a host of individual issues, which is for the moment impossible. The nominal rates of interest have, however, been analysed for the British territories by Professor Frankel.³ In 1913 the average rate in British Africa as a whole was 3.44 per cent. The large external debt of the Union was paying an average charge of 3.39 per cent., and 49.6 per cent. of the debt was at a rate of 3 per cent. For the remaining British territories the average rate was just 3½ per cent., and 83.3 per cent. of the whole was actually paying that rate. By 1932 the average rate for all territories had risen to 4.37 per cent., that of the Union's external debt to 3.97 per cent., and that of others to 4.85 per cent. By 1935 the average rate had declined to 4.18 per cent., that for the Union's external debt to 4.01 per cent., and that

¹ See Chap. XXII, p. 1512, and S. H. Frankel, *op. cit.*, p. 53.

² S. H. Frankel, *op. cit.*, chap. iii, pp. 88-9 and 91.

³ S. H. Frankel, *op. cit.*, Table 34, p. 174.

of others to 4.72 per cent. In 1935, of the Union's external debt of about £123,000,000, there was 47.7 per cent. at 3½ per cent. or lower rates, and 33.7 per cent. at as high a rate as 5 per cent. Of the remaining territories' loans, amounting to over £99,000,000, there was 48.5 per cent. at 5 per cent. or higher rates, including 18.7 per cent. of the whole at 6 per cent; only 14 per cent. of the government loans were bearing interest at rates below 4 per cent.

The Union's external debt, which was £108,000,000 in 1913, had increased to £166,000,000 in 1932. By 1935 it had diminished to £123,000,000, being replaced by internal debt. This had been no more than £11,000,000 in 1913; it was £125,000,000 in 1935. Thus the internally-held debt now exceeds the foreign debt. The other territories were indebted for no more than £12,500,000 in 1913. By 1935 their debt had risen to £99,000,000. Of this increase the greater part had taken place before 1925. By that year their combined debt had risen to £64,000,000. The high rates at present paid are thus in large measure a consequence of attempted expansion in the years of high interest rates immediately following the War, and those rates will continue, in the absence of special opportunities for conversion, for some years to come, since the same factors which required a high level of interest were held to require a long-term loan at that interest. Thus the Nigerian 6 per cent. loan of 1919 is redeemable between 1949 and 1979. The Gold Coast 6 per cent. loan of the same year is redeemable from 1945 to 1970, and the similar loan of Kenya of 1921 at any time after 1946. The debts at 5 per cent., mostly incurred in the early 1920's, are largely repayable during the late 1940's or early 1950's. In view of the fact that these loans were guaranteed by the British Government some surprise may be felt that it was necessary to issue them at so high a rate, and that more use could not be made of the system of short-term bonds. By 1931 a number of territories were able to borrow at 4 per cent., and between 1932 and 1935 there has been nearly £5,000,000 of loans at 3 per cent.

III. AFRICA'S SHARE IN WORLD TRADE

Africa's share in world production remains, despite this great investment, comparatively small.¹ The share of the whole con-

¹ The figures quoted in the remaining sections of this chapter and in the succeeding

continent (and not merely of that part which lies south of the Sahara) was in 1929, according to calculations made by the Economic and Financial Section of the League of Nations, approximately 4.5 per cent. of the world's export trade and 4.8 per cent. of the world's import trade. The shares of Africa south of the Sahara were no more than 2.8 and 2.6 per cent. respectively. These latter figures are almost identical with those for Oceania, and may be contrasted with the figures of 19.5 and 16.0 per cent. for North America, and 48.8 and 55.8 per cent. for Europe. If alternatively Africa's share in economic activity is measured in terms of the production of primary commodities, the results are not very different. The figures of world production analysed by the Economic Intelligence Service of the League of Nations are not, unfortunately, in such form as to make it easily possible to distinguish what proportion of world output comes from Africa south of the Sahara. If the figures for Africa as a whole are used, the share of the world primary production coming from the African continent was estimated to be 2.4 per cent. for the years 1925-9, the share of the whole continent in this case being almost equal to that of Oceania, and in marked contrast to the 43.3 per cent. of Europe, including the U.S.S.R., and to the 30.4 per cent. of North America. Since 1930 the African share has been increasing (in 1935 it was 2.8 per cent.), but this was in a large measure a consequence of the relative decline in North American production, resulting from the exceptional severity of the depression there, and was only in part to be explained by actual increases of African production. In agricultural products generally the share of Africa was somewhat greater, being 2.8 per cent. for 1925-9; in non-agricultural products it was substantially less, being 1.0 per cent. of the whole for those years. Between 1925-9 and 1935 there was an increase, to 3.2 per cent. in the former and 1.3 per cent. in the latter case.

But if we turn to individual commodities the share of Africa is in many cases very much greater than this. While Africa's share in the world production of metals generally was no more than

chapter are in the main derived from unpublished tables and memoranda prepared for this Survey by Dr. Charlotte Leubuscher, formerly Professor of Economics in the University of Berlin, and now Research Fellow of Lady Margaret Hall, Oxford. Upon her preliminary studies these chapters have been largely based. For her published work, see footnote on p. 689.

1·2 per cent. for 1925-9, and 2·5 per cent. for 1934, her share of gold production was 56·0 per cent. in the former years, of chrome ore 50·6 per cent., of manganese ore 16·4 per cent., of platinum 12·0 per cent., of tin ore 6·3 per cent., and of copper 7·3 per cent. It is impossible to state exactly her share in the world's output of radium and of vanadium. In each case it is almost certainly true to say that more than half of the world's output comes from Africa. Of non-metallic minerals generally the African share was estimated to be 2·3 per cent., but Africa contributed some 14·8 per cent. of the world's output of asbestos, and 11·9 per cent. of the world's output of graphite. The years of depression brought significant changes in the proportion that the African output of these metals bore to world production. In chrome ore the African share (mainly from Southern Rhodesia) fell to 17 per cent. in 1933, while in the case of copper it rose to 21·5 per cent., and in the case of tin to 8·6 per cent.

In raw materials generally the African share of production was for the years 1925-9 estimated to be 2·6 per cent. of the world production, rising to 3·1 per cent., again largely in consequence of the great decline of North American production, in 1935. But for the years 1925-9 Africa produced 93·6 per cent. of the world's palm and palm-kernel oil, 62·9 per cent. of the world's cocoa, 23·7 per cent. of the world's groundnuts, 7·7 per cent. of the world's sesame, 9·8 per cent. of the world's wool. The share of Africa in the world's sisal output is somewhat uncertain, as output figures for some of the chief producing areas do not exist. It is believed that Kenya and Tanganyika produce about one-third of the world's supply. Of some other products, the output, though large and important to the economy of some of the African territories, forms only a very small part of the world's total. Thus in 1932 African coffee was only some 2·5 per cent. and African tobacco 1·3 per cent. of the whole.

As in the case of metals, there have been considerable changes in the African share of the output of some of these products in recent years. The proportion of African production of palm and palm-kernel oil fell to 77·8 per cent. in 1933. That of cocoa had risen to 68·5 per cent. That of rubber, which was 0·7 per cent. of world output for the years 1925-9, had fallen by 1933 to the low

level of 0.2 per cent. On the other hand, the African share of ginned cotton had risen from 7.3 per cent. for the earlier period to 8.7 per cent. in 1933, and that of cotton seed is almost the same proportion.

It will be seen from the figures given above that Africa's share in international trade is considerably greater than her share in primary production. In 1929 her share of trade was 4.6 per cent., and her share in world primary production 2.5 per cent.; thus, in the case of Africa, production for export is relatively more important than in the world as a whole. This is in part an ordinary phenomenon of any country in the stage of economic development preceding the growth of local industries; it is in part a consequence of the relation between colonies and mother countries which peculiarly affects the continent of Africa. The abrupt transition from a primitive self-sufficient economy to a system of economic inter-dependence with the rest of the world, and more particularly with those countries which had provided the capital for the opening up of Africa, and now required to be paid interest on their investments, made necessary the rapid expansion of export crops. This need was reinforced by the problem confronting the native of discovering a means to earn money to buy imports and to pay his taxes. The solution has differed widely in different parts of Africa, but within single territories one crop or one product in many cases provides an unusually large proportion of the whole export. The Gambia, depending to the extent of 98 per cent. upon its export of groundnuts, is an extreme instance. Zanzibar derived 73 per cent. of its export income in 1935 from cloves, the Union of South Africa and Southern Rhodesia 72 per cent. and 64 per cent. respectively of theirs from gold, Northern Rhodesia 61 per cent. from copper, Uganda some 80 per cent. from cotton, Nigeria and Sierra Leone 35 per cent. and 47 per cent. respectively from export of palm oil and palm kernels. In some other territories the extent of dependence upon a single product has been somewhat lessened in recent years, but still remains considerable. Thus Nyasaland as late as 1932 was dependent to the extent of 86 per cent. of her exports upon tobacco, but by 1935 the growing output of tea and cotton had reduced this proportion to 42 per cent. In the case of the Gold Coast, in 1929 cocoa accounted for 79 per cent. of all exports, but by 1935 expansion of gold output

had reduced this to 56 per cent. In non-British territories the dependence upon single products or crops has been somewhat less, though groundnuts formed 49 per cent. of the exports in 1934 of French West Africa, cocoa 31 and 30 per cent. of the exports of the French Cameroons and of French Togoland, and sugar 66 per cent. of the exports of the area administered by the Moçambique Company and 26 per cent. of those of the area administered by the government in Portuguese East Africa.

This high degree of dependence upon the fortunes of a single commodity, and not infrequently also of a single market, has rendered many of those African territories very susceptible to the risks of industrial fluctuations. While the chief gold-producing territories have been relatively immune from this danger, indeed in a sense hedged against it, those which are mainly concerned in raw material production have suffered severely. Thus, Sierra Leone and Nigeria have suffered falls of 53 and 52 per cent. respectively in the value of their exports between 1929 and the worst of the subsequent five years, Kenya and Uganda a decline of 39 per cent., and Tanganyika and the Gold Coast, despite a growing output and value of gold production, declines of 56 and 39 per cent. respectively. But these reductions, grave as have been their effects upon the financial position of the territories involved, are not unparalleled in other continents. In the period under consideration (1929-34) the total recorded value of world exports, measured in gold dollars, declined by no less than 66 per cent. Africa, with a total decline of 48 per cent., suffered less than any other continent, and markedly less than North America, where the total decline was no less than 73 per cent. The effect of a sudden fall in prices differs widely in countries of a highly organized economy and in those where the organization is of a simple character. In Africa the period of depression had an early and significant effect on government finances,¹ and was also widely felt by wage-earners, with the exception of those employed in the gold mines or their connected industries. But it was felt in a minor degree by the large part of the population which is either occupied in cultivating subsistence crops or is able to turn to them when commercial crops cease to be remunerative.

¹ For detailed figures, see S. H. Frankel, *op. cit.*, Table 38, p. 184.

IV. THE DESTINATIONS OF AFRICAN EXPORTS

To distinguish the exports of African territories according to their countries of destination with any satisfactory accuracy is unfortunately impossible. The statistics prepared by a number of governments give information only of the country of immediate consignment, and where statistics indicate the country of destination it is far from clear where the ultimate consumption will take place. The shipping facilities available may dictate the immediate destinations of exports, and the existence of an entrepôt trade, or of refineries, or facilities for some primary process of manufacture, may result in far greater consignments to particular countries than are accounted for by final consumption. Thus in 1934 the Belgian Congo is shown as having exported in all 131,769 metric tons of copper. Of this, 40,201 tons appear as consigned to Belgium, 42,144 tons to Moçambique, 24,181 tons to Angola, and only 16,051 tons to Germany. On the other hand, the German customs figures for the same year show an import of 24,876 tons from the Belgian Congo, and a further 12,211 tons from the Belgium-Luxemburg customs-union, most of which probably came originally from the Belgian Congo. Such instances can be multiplied indefinitely, and go far to invalidate any general inferences which might be made upon the basis of published statistics. But if these difficulties are borne in mind, some analysis of the destinations of African exports may nevertheless be undertaken.

If we take first the British territories, from the Union of South Africa, South-West Africa, and the South African protectorates some 75 per cent. of the domestic exports, including bullion, was sent in 1934 to the United Kingdom, but this high percentage is very largely accounted for by the consignment of gold to London, and, if bullion be excluded, slightly less than 40 per cent. of all domestic exports was to the United Kingdom, some 16 per cent. to the rest of the British Empire (including, of course, other African territories), and nearly 44 per cent. to foreign countries. From the remaining British territories in the same year the proportion of exports sent to the United Kingdom was slightly less than 39 per cent., to the rest of the Empire about 16 per cent., and to foreign countries approximately 45 per cent. The change in these propor-

tions during recent years has not been considerable. The main difference since 1929 has been a decline of 3·4 per cent. in the share of foreign countries, mainly accounted for by the increased proportion of trade within the Empire, including trade between British African dependencies, which has risen from under 12 per cent. to approximately 16 per cent. of the whole.

These general figures conceal comparatively wide differences between individual territories, and between individual products. There is a small number of territories whose export trade is almost exclusively with the United Kingdom. These include Nyasaland, sending 96·8 per cent. in 1934, the Gambia 88·6 per cent., and the British mandated territory in the Cameroons, 93·8 per cent. Southern Rhodesia, if bullion is included, sent 72·9 per cent.; but if it is excluded, the United Kingdom's share of exports was no more than 40·6 per cent. An intermediate group sends rather more than half of its exports to the United Kingdom. This group includes Sierra Leone, 62·3 per cent. in 1934, and Anglo-Egyptian Sudan, 52·7 per cent. Finally a large number of territories have a greater trade with foreign countries, and with the rest of the British Empire, than with the United Kingdom itself. Thus Nigeria in 1934 exported 45·9 per cent. of its goods to the United Kingdom and 52·3 per cent. to foreign countries, of which 12·3 per cent. went to Germany, 12·1 per cent. to France, and 9·9 per cent. to the United States. The Gold Coast sent only 37·3 per cent. of its exports, apart from bullion, to the United Kingdom, and 60·0 per cent. to foreign countries, of which 22·2 per cent. went to the United States and 19·7 per cent. to Germany. Northern Rhodesia sent 44·2 per cent. to the United Kingdom and 53·8 per cent. to foreign countries, of which Germany took 24·4 per cent., entirely in purchases of copper and zinc.

In the two mandated territories of Tanganyika and South-West Africa the direct trade with the United Kingdom is not predominantly large. In the case of Tanganyika the exports to the United Kingdom are shown to be 27·4 per cent. of the whole, including gold, and 18·3 per cent. excluding gold. But some correction requires to be made to eliminate the effects of a transit trade through Kenya, which is shown as receiving some £818,000 of produce from Tanganyika, including over £450,000 of coffee. If

these figures are adjusted in accordance with the most probable hypotheses, the exports of Tanganyika, excluding gold, would appear to go to the extent of some 21.1 per cent. to the United Kingdom, 33.4 per cent. to the rest of the British Empire, and 45.5 per cent. to foreign countries, of which approximately 10.9 per cent. is the share of Germany. In the case of South-West Africa, approximately 25.4 per cent. of exports went in 1934 to the United Kingdom, 28.3 per cent. to foreign countries, of which 20.4 per cent. went to Germany, and 46.3 per cent. to the rest of the British Empire, entirely accounted for by trade with the Union of South Africa. But the proportions in which exports from this territory have been divided between countries have been extremely variable. In 1929, when the export of diamonds was some sixty times greater than in 1934, and the export of copper ore, non-existent in 1934, yielded over £700,000, the United Kingdom received 47.4 per cent. of all exports, foreign countries 37.5 per cent., and the rest of the British Empire (in effect the Union) no more than 15.1 per cent.

If we turn now to non-British territories, the French colonies south of the Sahara sent to France 71.7 per cent. of their exports in 1934. This figure had increased substantially during recent years—in 1929 it was no more than 52.7 per cent.—and the share of foreign countries had declined proportionately, from 46.8 to 27.3 per cent. The trade between the various French colonies is inconsiderable, and at neither date exceeded 1 per cent. of the whole. The French share was highest in 1934 in French West Africa, where it was 78 per cent. of the whole. In French Equatorial Africa it was 64.8 per cent. It was lowest (apart from the unimportant trade of French Somaliland) in Togoland, where it was 47.3 per cent. The increased proportion of export trade with France was most noticeable in the case of French Equatorial Africa, where the French share had been only about 33 per cent. in 1929. The increase was considerable also in French West Africa and in the Cameroons. In Togoland and in French Somaliland there were decreases in the French share. In the case of the Belgian Congo 74.9 per cent. of exports was consigned to the mother country in 1934 as compared with 56.6 per cent. in 1929. But, as was noted above, the Belgian statistics indicate only the country of consignment and not of ultimate destination, and the figures

for other countries include consignments to Angola and Moçambique for further shipment, equal in 1934 to 8.8 per cent. of all exports. On a reasonable hypothesis regarding the division of these consignments, the share of Belgium would probably be not much below 80 per cent. in 1934. The export trade of Ruanda-Urundi was to the extent of approximately 85.7 per cent. with Belgium in 1934, as compared with 69.1 per cent. in 1929. The exports of the Portuguese colonies are to a less significant extent to the mother country. Angola in 1929 sent 37.9 per cent. to Portugal. In 1933 this figure had risen to 57.1 per cent. In the case of Moçambique, the colony and the company's area together sent 36.5 per cent. of the exports of local produce to Portugal in 1934.

There are considerable differences in the destinations of African exports, not only according to the nationality of the exporting territory, but also according to the nature of the product exported. Thus, of the groundnuts exported in 1934, about 40 per cent. originated in British and 60 per cent. in French territories. About 75 per cent. was consigned to France and only 5 per cent. to Great Britain. Of palm oil, 60 per cent. came from British, 23 per cent. from Belgian, and 13 per cent. from French territories. Of this, 39 per cent. went to Great Britain, 20 per cent. to Italy, 9 per cent. to France, and 5 per cent. to Germany. On the other hand, Germany took 31 per cent. of palm kernels and Holland 17 per cent. Of cotton, 32 per cent. went to India, 31 per cent. to Great Britain, 17 per cent. to Belgium. Of cocoa, Great Britain took only 20 per cent., though 82 per cent. was produced in British territories, while the United States took 27 per cent. and Germany 23 per cent. Of the sisal, Belgium took 34 per cent., though Belgian territories contributed a negligible share of the output, Britain only 27 per cent., though her possessions produced 82 per cent., and Germany 19 per cent. The ultimate distribution of African copper is not easy to calculate, since a large part is shown as consigned to Moçambique, Angola, and other African territories, without the indication of the final destination. A very rough calculation would suggest that in 1934 approximately 30 per cent. was sent to Great Britain, 26 per cent. to Germany, 23 per cent. to Belgium, and 3 per cent. to France. But, as was indicated above, further re-consignment almost certainly modifies even this result.

Important as is the trade with the mother country from the point of view of the African exporting territory, it remains nevertheless relatively unimportant in aggregate in the imports of the great imperial powers. Thus imports into Great Britain from British African dependencies other than the Union and South-West Africa accounted for no more than 2.0 per cent. of the value of all imports in 1934. In the case of France, both the absolute trade with French dependencies and its proportion of the whole has been increasing in recent years, but in 1934 it did not exceed 2.8 per cent., rising to 4.1 per cent. in 1935. The Belgian imports from the Congo accounted for 5.4 per cent. of all Belgian imports in 1934, and imports from the Portuguese possessions for 10.9 per cent. of all Portuguese imports in the same year. Imports from all African territories south of the Sahara, inclusive of the Union and South-West Africa, accounted for about 3.2 per cent. of the imports of the United Kingdom and 4.1 per cent. of the imports of Germany in 1934. In 1913 Germany derived 4.6 per cent. of all her imports from the whole African continent (2.9 per cent. from south of the Sahara), and 0.4 per cent. from her African colonies. In 1936 she took 6.9 per cent. of her imports from the whole continent and 0.5 per cent. from her former colonies. But once again it is necessary to distinguish the relative importance of Africa in individual products from its importance in the aggregate of all trade. In the case of Great Britain in 1936 about 99 per cent. of palm kernels and about 76 per cent. of unrefined palm oil, about 92 per cent. of cocoa, about 22 per cent. of copper, and about 15 per cent. of platinum, about 32 per cent. of merino wool and over 82 per cent. of mohair, about 51 per cent. of mahogany and 12 per cent. of walnut came from African sources, and in the majority of cases almost entirely from British territories.

Of German imports in 1936, some 34 per cent. of copper was shown as coming from African sources, and a further 20 per cent. from the entrepôt countries, Holland and Great Britain, some of which was almost certainly African. About 47 per cent. of manganese ores, about 31 per cent. of edible oils, about 16 per cent. of wool, and 3 per cent. of cotton was shown in the German customs statistics as imported from African countries.

V. THE SOURCES OF AFRICAN IMPORTS

If we turn next to African imports, here again the smallness of the total trade in comparison with that of the other great and densely populated continents must be emphasized. The imports of Africa south of the Sahara amounted in 1935 to no more than 3·4 per cent. of the world's recorded imports of merchandise, a figure slightly greater than that of Oceania, but scarcely more than half that of South and Central America. The imports of the Union of South Africa are predominant in the total. They accounted in 1935 for 68 per cent. of the imports of all British territories south of the Sahara. This is the result not merely of a greater European population, but also of larger consumption of imports per head than elsewhere, consequent in part upon a higher degree of industrial development. Thus in 1935 the value of imported goods per head of population in the Union was £8 12s. 10d. The only other territory with a figure that approached this was the very similar territory of Southern Rhodesia, with £4 8s. per head. Zanzibar followed with a figure of £3 1s. 7d. The Gambia, the Gold Coast, and Northern Rhodesia took between £2 and £2 10s. per head; Kenya, the Sudan, and Somaliland between 15s. and £1; and South-West Africa, Tanganyika, and Sierra Leone between 11s. and 12s. Finally Uganda, Nigeria, and Nyasaland took only between 7s. and 8s. per head.

The imports of the Union are as diverse as those of any other considerable territory. Iron and steel goods and manufactures accounted in 1935 for just over 25 per cent. of the whole. The second most important group of imports was that consisting of motor-cars, bicycles, &c., which amounted to 12·1 per cent. of the whole. Apparel of various descriptions followed with 8·1 per cent. Cotton piece-goods, which were 6·8 per cent. of the whole, and other articles of native consumption were considerable, but were overshadowed by these other items. The proportions of different imports are not widely different in Southern Rhodesia and in Kenya from those of the Union. In Northern Rhodesia (partly in consequence of industrial expansion) the proportion of iron and steel products, 35·9 per cent., has been the largest of any territory. In the Gold Coast, while iron and steel goods accounted for over

20 per cent. of the whole, goods for native consumption were relatively more important and cotton piece-goods accounted for 23.2 per cent. of the whole. Finally there is a group of territories, including Nigeria, Sierra Leone, and the Gambia on the West Coast, and Tanganyika, Nyasaland, and Uganda in East Africa, where the import of cotton piece-goods and other articles for native consumption are of predominant importance. Thus in Nigeria piece goods account for 32.5 per cent. of all imports and iron and steel for only 11.7 per cent.

Apart from the Union the largest markets for imported goods are provided by Nigeria and the Gold Coast, which in 1935 took 20.0 and 18.9 per cent. respectively of the imports into British territories other than the Union and South-West Africa, by Southern Rhodesia which took 14.2 per cent., and by the Sudan which took 12.7 per cent. of such imports. Kenya, Northern Rhodesia, and Tanganyika each received a little over 7 per cent., and Uganda about 4 per cent. of such imports. Nyasaland, Sierra Leone, Zanzibar, and the Gambia did not exceed 3 per cent.

The sources of these extremely diverse imports cannot here be analysed in detail. Of the whole value of imports into the British territories in 1934, approximately 46.5 per cent. came from the United Kingdom. The Union and South-West Africa in that year drew approximately 48.4 per cent. of all their imports, and the remaining British territories approximately 43.1 per cent., from the United Kingdom. In the case of the French territories approximately 44 per cent., in the case of the Belgian approximately 40 per cent., and in the case of the Portuguese 43.9 per cent., came from the respective mother countries. The proportions of imports coming from the mother country vary, however, substantially as between different products. In the case of imports of the main manufactures of iron and steel, and of machinery and implements, the share of British products in the imports of the British territories other than the Union and South-West Africa was in 1935 approximately 63.4 per cent., and in the case of those two territories approximately 52.3 per cent. In the case of cotton piece-goods the British share has been markedly different in different parts of Africa. In West Africa during the years 1926 to 1932 the proportion of imports, measured by yardage, that came from the United

Kingdom was year by year close to 90 per cent. of the whole. In 1933 the proportion fell to 76·1 per cent., and in 1934 to 63·5 per cent. Japanese imports had risen from 2·5 per cent. in 1932 to 18·5 per cent. in 1934. In that year quotas were imposed in all the West African colonies¹ upon imports of certain Japanese products. The methods of determination varied somewhat, but in each case the basis was the imports of the years 1927-31, before Japanese competition became acute.² In 1935 the British share of imports of piece goods had again risen to 81 per cent.

In East Africa the situation is, from a British point of view, far less satisfactory. The proportion of British imports of piece goods, as measured by yardage, had already by 1926 fallen below 30 per cent. of the whole. For the years 1927 to 1930 it stood slightly above 20 per cent., for the years 1931 to 1934 between 15 and 10 per cent., and in 1935 was no more than 9·6 per cent. In Nyasaland it was in that year less than 6 per cent. of the whole.

Not only the English, but also British Indian and American producers of cotton goods, have lost substantial markets in East Africa. In Kenya and Uganda, for example, in 1929 some 19 per cent. of imported cotton goods came from the United Kingdom, some 14 per cent. from British India, 13 per cent. from the United States, 11 per cent. from the Netherlands, and 39 per cent. from Japan. By 1935 just under 9 per cent. came from the United Kingdom, some 2 per cent. from British India, less than 1 per cent. from the Netherlands, and the United States imports had almost ceased; Japanese imports had risen to over 88 per cent. of the whole. In these East African territories protection cannot be freely applied, owing to the existence of treaty and other obligations which will be discussed in more detail below.

The Japanese competition is by no means confined to cotton piece goods. To take Kenya and Uganda once more as an example, Japanese imports in 1935 exceeded those of any other country, not only in silk, where Japan had always been predominant, but also in artificial silk, where her share was over 88 per cent. of the whole, in woollen tissues, in boots and shoes, in

¹ The quota did not apply to the mandated territories of British Togoland and Cameroons.

² See G. E. Hubbard, *Eastern Industrialization and its Effect on the West* (2nd ed.), 1938, pp. 19-21.

haberdashery, hosiery, in hats and caps, in umbrellas, in many sections of glass and china-ware, in cycle parts and accessories, and enamelled hollow-ware. Japan was the second largest source of imports, doing a substantial part of the whole trade, in toys, gramophones, lamps, cycle tubes, soap, and electric light bulbs. In 1934 over 22 per cent. of the imports into Tanganyika and Nyasaland, over 19 per cent. of imports into the Sudan, and over 15 per cent. of those into Kenya and Uganda came from Japan. The competition is felt almost equally in non-British territories. In the Congo some 10 per cent. of all imports was Japanese.

The problem of Japanese imports is not, of course, confined to the markets of Africa, and any full discussion of it would involve a general consideration of trade relations between Japan and other countries far wider than can be undertaken here. The entry of any new great manufacturing nation into the markets of the world must inevitably result in dislocations and readjustments which, however much they may benefit the world as a whole, will almost certainly do damage, temporarily or permanently, to those countries which previously enjoyed a large hold upon the markets invaded. But Japan has entered the world's markets not only as a seller but also as a buyer. From Great Britain and the British Empire she imported in 1936, according to the Japanese import statistics,¹ about £51,000,000 of goods, and exported to Great Britain and the British Empire about £41,000,000. Thus the British countries as a whole have a favourable balance of about £10,000,000. The large imports of Indian cotton, of Australian, New Zealand, and South African wool, of British machinery, and of rubber from the Straits Settlements, must be set against the exports of cotton and rayon goods, and a great variety of other manufactures. If the direct trade of the African countries south of the Sahara is considered in isolation, the exports of Japanese goods were shown in 1936 to be valued at about £6,900,000, and imports to Japan from the same territories at about £3,200,000. In 1936 Japanese imports from Kenya and Uganda, mainly cotton from Uganda, were almost equal to exports to those territories,

¹ See *Japan-Manchoukuo Yearbook*, 1938, pp. 478-80. The Japanese imports are, of course, valued inclusive of freight and insurance, and the exports exclusive of these, so that the relative total values of imports and exports will be somewhat different in Japan from those values at African ports.

according to values at the Japanese port. The Union's direct exports of wool covered about half the Union's imports of Japanese manufactures.

But quite apart from this dual aspect of Japanese economic activity, it must be remembered that Japan has succeeded in providing native buyers with the cheap goods that they have been able to afford. Whether this cheapness has been at the cost of a proportionate diminution of quality, it is by no means easy to judge. There is evidence to suggest that the preference for Japanese goods was in part a consequence of the decline of incomes consequent upon the depression, and it is possible that with increasing money incomes, demand may return to the better but more highly priced British goods. Thus during 1936 the proportion of Japanese goods imported into Kenya and Uganda has very slightly declined as compared with 1935. But the Japanese hold on the cotton piece-goods trade has become even more predominant. The British imports, measured in square yards, have fallen from 10.1 to 6.9 per cent. of those of Japan. It has been suggested that the admission of Japanese cheap goods may in the long run prove to be a less serious injury to British trade than might at first sight appear likely. It is in general true that higher standards of living result in an increase of imports per head, even if the proportion of the income spent upon them declines. In theory, therefore, anything that contributes to cheapen the necessities of native life might accelerate the adoption of European standards and provide a greater margin for the purchase of such minor luxuries as we are well fitted to supply. There are, however, many possibilities which may prevent this result, not the least of which is, that Japan may prove herself as capable of providing the minor luxuries of life as of capturing the market for piece goods.

Of countries other than the respective mother countries and Japan, those most concerned with African trade are Germany, and even in non-British territories, Great Britain. Germany's exports to the British African territories other than the Union and South-West Africa amounted in 1934 to a little over 5 per cent. of the whole. The proportion was highest in the mandated territory of Tanganyika, where it was about 9.8 per cent. of the whole; exports to Ruanda-Urundi were in the same year approximately

5·6 per cent. of the whole. The value of the total German exports to Tanganyika and Ruanda-Urundi combined was in 1934 approximately £245,000. It is of interest to compare this figure with that of approximately £1,264,000, the export of Germany to the same area in 1912. The German share of the trade to the whole of the pre-War colony has declined from 51·2 to 9·5 per cent. Similarly in 1912 Germany received approximately 56·6 per cent. of the exports of the combined territories. In 1934 she received only 8·0 per cent. of the exports of Tanganyika, and received no mention among the countries to which goods were consigned from Ruanda-Urundi, though indirectly certain goods may have reached her.

It is evident from the figures both for imports and for exports that the mother country enjoys in a large number of cases an advantage over other countries which, though varying greatly in its extent, is still on the whole sufficiently marked. It is of interest to attempt to judge what factors have been important in securing this advantage. In this connexion two questions will require consideration: first, how far the advantage may be due to the importance of government orders, and their general fulfilment from the mother country; second, how far fiscal and other devices have been employed to give preference to goods exported from the mother country.

Government orders are ordinarily more important in Africa, where so large a proportion of railway and other investment is commonly undertaken by the governments concerned, than they are in many other parts of the world. These orders have been analysed for two periods, first for the relatively prosperous years 1925-9, second for the years 1930-4, which, though not uniformly a period of depression in all African territories, were nevertheless years in which, in the majority of them, expenditure on railway extensions or on capital equipment generally was on a lower scale than in the earlier years. During the earlier period the government's share of the value of total imports (excluding sugar purchases for public sale) was as high as 24·4 per cent. in the Sudan. In the East African dependencies the figure was in the neighbourhood of 15 per cent., being highest in Kenya and Uganda, where it reached 18·4 per cent. of net imports. In Nyasaland and

Southern Rhodesia, where railways are not in government ownership, the percentage was only 1·8 and 3·7 per cent. respectively of net imports. In West Africa, government imports were of smaller relative importance than in the East. They were as high as 13·1 per cent. in Sierra Leone, but no more than 9·3 and 7·4 per cent. respectively in Nigeria and the Gold Coast. In the depression years the proportion has almost everywhere been lower. In the Sudan it has fallen to 17·5 per cent., in Kenya and Uganda to 10·8 per cent., and in the West Coast territories to a figure close in each case to 6·5 per cent. The purchases by the various governments of British territories are almost exclusively of goods from the United Kingdom or from other countries within the Empire. The exceptions would appear to be chiefly purchases of scientific instruments or of apparatus, that are best obtainable in Germany, the United States, or elsewhere. A similar analysis of government imports into non-British territories is not easy from existing statistical material. Moreover, in several instances, of which the Belgian Congo will provide an example, the dividing line between governmental and private enterprise is so ill-defined that any examination of the problem would be difficult. But there is no reason to think that the results would differ widely from those of the British territories. While the advantage of the mother country in the supply of material to the governments has been an important source of advantage, it is clear that it does not provide the complete explanation of the pre-dominance of mother-country imports.

The use of the fiscal weapon to give a preference to the mother country in the import trade of African dependencies is less widespread than in other continents. The terms laid down by the League of Nations for the permanent mandates of Africa, as elsewhere, require that complete economic, industrial, and commercial equality shall be given to all nationals of states that are members of the League.¹ This sets an important limitation upon the granting of any form of preference in the mandated territories. It is generally agreed by the mandatory powers that under the terms of the mandate, there is no obligation on their part to maintain economic equality in the case of nations (as for instance Italy or

¹ *The Covenant of the League of Nations*, Article 22; *League of Nations, British Mandate for East Africa (Tanganyika Territory)*, Article 7.

Japan) which have left the League.¹ These countries continue, however, to enjoy the same status as before, in view of other treaties or agreements, such as those about to be mentioned, into which the mandatory powers have entered, in some cases before acceptance of the mandate. In the second place, the group of treaties commonly known as the Congo Basin Treaties preclude any form of preferential tariff in the areas to which they apply. The original treaty was signed in Berlin, on February 26, 1885, by Great Britain, Germany, Austria, Belgium, Denmark, Spain, France, Italy, Holland, Portugal, Russia, Norway, Sweden, and the United States of America. It was ratified by all save the last. No time limit was set to its operation. The treaty was concerned with far wider issues than the prevention of preferential tariffs. It dealt with important issues of equality, without respect of nation, in the exploitation of African resources, both in matters of industrial development and of individual settlement. It included declarations relating to the abolition of the slave trade, and the neutrality of these African territories in the event of war. It provided for the free navigation of the Niger and the Congo. These wider issues must be remembered in any discussion of the abrogation of the treaty, for in many respects it has been of immense benefit both to the development of Africa and to the position of investors in African territories. The original treaty provided for completely free trade within the area to which it applied. This was considerably wider than the Congo basin proper. It included an eastern extension to the Indian Ocean, bounded on the north by the fifth parallel of latitude meeting the sea in Italian Somaliland, on the south by an irregular line which runs north-eastward across Northern Rhodesia from the south-eastern boundary of the Belgian Congo to a point close to the common junction of Northern Rhodesia, Tanganyika, and Nyasaland, thence southwards along the western boundary of Nyasaland to the Zambesi, thence eastwards following the river to its mouth. Thus it includes the whole of Kenya, Uganda, Tanganyika, and Nyasaland, and a small and relatively unimportant corner of Northern Rhodesia, the whole of the Belgian Congo, a large part of French Equatorial Africa, and parts both of Portuguese East and West Africa.

¹ *Report to the League of Nations on Tanganyika Territory*, 1937, para. 46.

The original treaty was modified by various subsequent treaties, and in particular by that of Brussels, signed in 1890, which authorized the powers which had signed or acceded to the Treaty of Berlin to impose duties for revenue purposes, not to exceed 10 per cent. *ad valorem*, and without differential treatment or transit duties. The War of 1914-18 put an end to all treaties as between opposing belligerents, but left unaffected treaties between allied belligerents, or between belligerents and neutrals. A conference was therefore called at St. Germain-en-Laye in 1919 for the purpose of revising the Acts of Berlin and Brussels. The resulting convention, which now governs the trade of the Congo basin conventional zone, was ratified by Great Britain, Belgium, France, Japan, Portugal, and the United States. It provides that the signatory powers shall maintain between their respective nationals and those of states members of the League of Nations, which may adhere to the convention, a complete commercial equality in the area defined in the Act of Berlin. Since, except in regard to the schedule of areas, the convention abrogates the Treaties of Berlin and of Brussels, the limitation of customs duties to 10 per cent. no longer applies, and the sole requirement is equality of treatment to nationals of all states. Thus in 1934 Kenya and Uganda changed their tariff from an *ad valorem* to an alternative specific and *ad valorem* basis. The complete equality of treatment has always been subject to one reservation. Portugal, at that time the only power possessing territory in the eastern extension, agreed to the free trade proposals only subject to the condition that they should apply to new acquisitions of territory and not to the existing Portuguese colony. This reservation was renewed at the Convention of St. Germain-en-Laye, and the Portuguese have always regarded themselves as free to impose differential duties, and they have in practice done so in certain cases.

The denunciation of the Congo Basin Treaties has been mooted on more than one occasion, and the recent growth of Japanese competition in the Congo basin area has led to a renewed demand that the countries which have spent their money in developing African territories should be permitted to enjoy some measure of preference in its trade, or at least that some revision of the boundaries of the zone should be permitted, so that it should be to a

greater degree continuous with present political units. No complete discussion of the merits and demerits of such a proposal can be here attempted. It is important, however, in any examination of the problem to remember that any general raising of tariff barriers within the African continent might in certain respects prove to be detrimental both to Great Britain and to the British Empire. British exports to non-British territories lying partly or wholly within the Congo basin zone are greater than imports of Japanese goods into British territories in the zone. There is in addition an important trade between the Union, the Rhodesias, and Kenya and Uganda on the one hand, and the non-British countries within the conventional zone on the other hand.

In the British areas unaffected by the Congo Basin Treaties, preference to British goods is sometimes prevented by treaties of more local application. In Nigeria any exclusively imperial preferential duties have been prohibited by the Anglo-French Convention of 1898;¹ the relevant article of the Convention has, however, been denounced by France, with effect from October 1936, and the tariff régime now to be adopted is under consideration. The same treaty has prevented imperial preferences in the Gold Coast,² but in both territories a system of quotas or additional duties has been applied (as was seen above) to imports of certain goods of Japanese origin. In Sierra Leone there are no similar limitations on the power to grant preferences. Import duties are partly on a specific, partly on an *ad valorem* basis. A preference of 10 per cent. is given to products of the British Empire in every case where a duty is payable.

In the Union of South Africa, as an outcome of the Imperial Conference held at Ottawa in 1932, the preferences previously extended to British goods have been abandoned in favour of specific trade agreements giving preference to goods which are the produce of the countries concerned. Such agreements have been entered into with Great Britain and Northern Ireland, Eire, and Canada, and are embodied in Act 8 of 1933. Under the tariff introduced in 1935, the duties imposed on different commodities are reckoned according to three separate scales, a minimum, an

¹ *An Economic Survey of the Colonial Empire*, 1935, p. 139.

² *Ibid.* 1933, p. 111.

intermediate, and a maximum. The minimum scale applies to imports from British countries with which trade agreements have been concluded; the intermediate scale to non-British countries with whom reciprocal trade agreements have been negotiated; the maximum scale in all cases in which an agreement to charge the minimum or intermediate scales has not been concluded. In addition, suspended duties and dumping duties enable protection to home industries to be increased when a protective duty has proved insufficient, or when as the result of policy, bounties, or exchange depreciation, goods are being sold in the home market at abnormally low prices.¹

The Southern and Northern Rhodesia customs tariffs were based on the Union tariff of 1925, and agreements were made between the three territories in 1930. Since 1931, however, there have been wide divergences in all three tariffs. In 1933 a new agreement was made between the Rhodesias, and in 1935 the previous agreement between Southern Rhodesia and the Union was terminated, and a number of changes were introduced in Southern Rhodesia which increased the duties on foreign and dominion goods and reduced duties on United Kingdom and colonial goods. Northern Rhodesia decided not to adopt the amended tariff, with the result that the differences in rates between the Northern Rhodesia and Union tariffs are not so great as those between Northern and Southern Rhodesia. The agreements provide for free entry or preferential treatment of the exports of the produce of one territory into the area of another, and for the refunding by the territory to which import duties have been paid of the duty levied on goods transferred to another territory. Certain restrictions, however, are placed on the free entry of agricultural produce from one territory to another. Since in practice a large part of the imports enter through South African ports, the Union Government pays annually to the Rhodesias a part of its customs revenue less 5 per cent. of the duty levied.

A more complete customs union exists between Kenya, Uganda, and Tanganyika, under which the produce and manufacture of any of the three territories are admitted free of duty into the consuming territory, and duty-paid goods may be transferred to any of

¹ Act 44 of 1935.

the other territories, but no preferential treatment can be given to British goods.¹

Some parts of the French territories fall inside the Congo basin zone, and preference is thereby debarred. Outside the Congo basin zone is a further area in which, in accordance with a convention of 1898 between Great Britain and France, no preference could formerly be given to French goods. In the free zone outside these convention zones, the French Government charge both a general duty and a surtax on dutiable goods of non-French origin. As was indicated above,² the French Government in 1935 suggested the suspension from October 1936 of the relevant article of the convention, and unified the customs systems of the two zones.

The Belgian Congo, lying entirely inside the Congo basin zone, has a tariff system that is partly specific, partly *ad valorem*. Cotton goods and blankets, despite Japanese competition, remain on an *ad valorem* basis. No preferences are given to Belgian producers.

In the Portuguese territories the duties are mainly on an *ad valorem* basis, but certain articles are subject to specific duties, and their number is being progressively increased. The latter include many foreign articles for the native trade, such as cotton goods, blankets, shoes, and native hoes. In addition to these duties, freedom of trade is limited by the existence of import and exchange restrictions. A decree of 1932 divided imports into Portuguese East Africa into two categories, prime necessities and luxuries, and permitted the purchase of the latter only after the requirements for exchange to buy necessities had been met. Quotas were fixed for individual categories of luxury goods, higher in most cases for Portuguese, lower for foreign goods, and ranging in 1936 from virtual prohibition to some 60 per cent. of the 1931 imports. In Moçambique Colony the limitations imposed by the Congo Basin Treaties do not affect the freedom to grant preference to the mother country and to other Portuguese colonies, and duties on foreign goods are in some cases from twice to five times those on Portuguese imports. Angola lies partly within, partly outside, the conventional basin of the Congo, and two scales of duties exist, one applicable

¹ See above, pp. 1340 ff.

² See above, p. 1343.

within, and the other, rather higher, outside the zone. Within it no preference exists at present for Portuguese goods. Outside there is a 60 per cent. reduction of duty on goods from Portugal and 50 per cent. on those from other Portuguese colonies, with a further 10 per cent. reduction for goods shipped in Portuguese ships. As in Moçambique, there have been restrictions since 1931 on dealings in foreign exchange. An exchange fund, replenished by receipts from customs duties payable in foreign currencies, by three-fourths of the value of all exports, and by any foreign currency received, is made available, first for government needs, secondly for dividends on foreign capital, and only finally, so far as funds permit, to buy imports. The effect has been to give a considerable measure of preference to Portuguese as compared with foreign products.

In some territories it is clear that the predominance of the mother-country trade can largely be explained by government purchases and fiscal preferences taken together. But in a considerable number of cases these are insufficient to explain the whole, or even a large part, of the advantage. It would appear that this must be found rather in such physical connexions between colony and mother country as are provided by the existence of regular steamship sailings, or more recently of direct air services; in the less tangible connexions which arise from a closer knowledge of the standing and reputation of firms and of the quality to be expected of their products, from the opportunity of dealing with concerns that speak the same language and are subject, in an emergency, to familiar processes of law, and from a natural preference for the goods of one's native country; finally in the advantages of making payments or entering into contracts in a currency that bears a fixed relation to the local currency.

This last advantage has been so widely canvassed that it needs further examination. Whether a country is buying goods from another using the same currency, or a different one, an import must be paid for by the importing country. The latter can only obtain the means to make the payment either from the sale of exports or from a change in its indebtedness to other countries. It may be somewhat easier for a mother country to buy imports from one of its dependencies, without an immediately countervailing

export, merely because the financial institutions of the two countries are better accustomed to being indebted to each other. In the particular case of sterling, it may be that exporters, having accepted the most commonly used international money, are more inclined to use it to buy British goods. But, this apart, in any longer period the greater ease of the mother country in buying imports must depend upon its greater ease in securing markets for its exports. Thus the advantage of a power possessing colonies, and the handicap of a country that lacks colonies, depend upon their comparative opportunities to expand their exports so that they may secure those imports which they need. Of the exports of mother countries, however, a large part is almost everywhere an export of capital goods, balanced not by immediate imports of raw materials, but by more distant promises to pay interest. In the very short run this export of capital goods does nothing to create countervailing exports to the mother country, but over a longer period it both creates facilities for the production of such exports, and an obligation to send them in order to provide interest payments on the earlier loan.

In a freely operating economic system it would be true to say that if any country set sufficient store upon colonial imports to be prepared to reduce its export prices to obtain them, it could do so. Whether in the existing situation a country can equally succeed in increasing its exports to obtain them is less easy to answer categorically. It has been argued that, in the face of duties and of the advantages of mother countries, the policy of lowering export prices, or lowering exchange rates which has the same result, has been tried and has proved unworkable.¹ Such a conclusion is difficult either to prove or to disprove. It is not impossible that, while a small change of export prices might be of little advantage, a considerably greater one would be highly effective. As we have seen, Japan appears to have been successful in increasing its trade with the African dependencies of other powers, while Germany has not. But any discussion of elasticities of demand is fraught with difficulties in a world in which quotas and restrictions are more important than relative costs of production. The problem of

¹ For the views of Dr. Schacht regarding this problem, see, e.g., S. H. Roberts, *The House that Hitler Built*, 1937, pp. 145-51.

colonial imports is indeed only a single aspect of a much wider problem of currency policies on the one hand, and of barriers to international trade on the other.

VI. THE BALANCE OF TRADE

The investment of capital in the development of African territories contemplates, it has been seen, the subsequent creation of an export surplus from which to provide for interest payments. It has been one of the difficulties of colonial territories to make the transition from the stage of investment, when imports tend to exceed exports, to the stage in which a sufficient export surplus exists to meet these charges. So long as foreign investment takes the form of actual dispatch of machinery or materials, no great problem is caused by its cessation. But not infrequently foreign investment takes the rather different form of providing temporarily the means to buy imported commodities for consumption, thus setting free individuals living within the territory to occupy themselves in the creation of capital works, such as roads, buildings, railway earthworks, cuttings and tunnels, or mining development. Where a country has come to depend upon an import surplus of consumable goods of this kind, the transition is likely to be considerably more difficult.

It is not easy to measure accurately the present investment from year to year in individual territories. Professor Frankel's calculations, based in the main upon public issues, are sufficiently trustworthy over long periods, but over shorter periods they are less reliable. For the actual investment, the creation of capital works, often precedes the public issue, and takes initially the form of private investment which cannot directly be measured. The most accurate indication of the volume of foreign investment is to be obtained from a calculation of the balance of payments of a territory.

A knowledge of the balance of payments is so necessary to any complete understanding of the situation of a country, that it is surprising that it has so rarely been calculated for African territories. Apart from the Union, where the figures are annually available, there have been only occasional attempts, such as that made by the Economic Development Committee of Kenya, to

make a calculation for one individual year. Few of these have been wholly successful, and most have suffered by the exclusion of some at least of the relevant data. But it should not be unreasonably difficult or onerous to collect sufficient information to provide a broad indication of the current state of affairs.

In the absence of more complete information it is of interest to calculate the visible surpluses of exports for certain territories and to compare them with the necessary home charges for debt and for pensions and gratuities. The debt charges include interest payments due from the railways as well as from the governments, and sinking fund as well as interest payments. The surplus of exports is calculated inclusive of movements in each direction of bullion and specie. To some extent this is unsatisfactory, since inward specie movements are in certain cases to be regarded as a consequence of a surplus of exports, or outward movements as one of a deficiency. On the other hand, where there is a continuous inflow of specie, that constitutes a normal import of the territory, and where there is a regular shipment of bullion from gold mines, that is a normal export of the territory. Since in most cases bullion movements are not distinguished from specie movements, and the normal inflow of specie is hard to determine, it is probably best to take the surplus of exports including specie movements.

The relation of the excess of exports to the fixed home charges on government account is, of course, only a broad indication of the industrial health of the territory concerned. On the credit side there must be added to the exports any receipts by persons resident in the territory of dividends or pensions or other remittances from abroad, any remittances by missionary societies or similar bodies, any expenditure by tourists or other non-residents. On the debit side, in addition to payments for imports and for home charges, there must be provision for leave pay, and for the homeward remittances of serving officials. What remains will then represent, in the absence of any current capital movements, the profits remitted abroad by private investors. If these are known it will be possible to calculate the inward or outward flow of capital.

There are a few territories which have had adverse balances of imports over exports in all except the most favourable years. Thus the Sudan had an average excess of imports of £1,006,000 for the

years 1915-30, partly explained by investment in the irrigation schemes. In 1932 the balance became favourable, and in 1936 there was an excess of £1,040,000 of exports to meet interest and other home charges. In most territories there has ordinarily been a favourable balance, though not always sufficiently large to cover the necessary home charges. In Tanganyika in 1934 the export surplus was about £367,000. The debt charges and pensions alone required in the same year about £453,000. In 1936 the surplus had risen to £1,341,000 and the same charges to about £521,000. In Nyasaland there was a surplus of exports of £268,000 in 1934, which had fallen in 1936 to £24,000, largely as the result of a big inflow of specie in the latter year. Debt and pension charges amounted to about £43,000 in 1934 and about £100,000 in 1936. In Northern Rhodesia the copper exports have provided an enormous export surplus, about £1,537,000 in 1934 and as much as £3,696,000 in 1936. Pensions and debt charges were about £165,000 and £184,000 in the two years.

In Kenya the position was closely scrutinized by the Economic Development Committee in 1935, who found some grounds for disquiet. The entrepôt trade of Kenya with Tanganyika and Uganda, and the common railway system shared with the latter, make Kenya's individual position peculiarly difficult to analyse. The figures of the majority and minority reports of the Committee differ slightly, but both are agreed in finding a visible adverse balance of about £3,000,000 in the years 1928-9, of about £1,300,000 in 1930, becoming slightly favourable in 1933. Debt and pensions charges would absorb about £1,250,000. Since 1933 there is little doubt that the position of Kenya has very considerably improved. If it is considered in conjunction with that of Uganda it would appear that in 1934 there was a joint export surplus of about £1,797,000, while their joint debt and pension charges amounted to about £1,403,000. In 1936 the surplus had risen to £3,169,000 and the home charges to £1,469,000.

It was pointed out above that the items which have been included do not exhaust the field of necessary remittances, and that a surplus is necessary also to cover leave pay and expenditure, and home remittances of serving officers. While these cannot be calculated with accuracy from any published statistics it is important to

form some idea of their probable magnitude. The total of personal emoluments, European and native, in the two territories was in 1934 £1,693,000. When allowance is made for the fact that certain reliefs take place at the end of a term of service, it would appear that about one-eighth of the personal emoluments is drawn in the more healthy territories by European officers on leave. This would require about £200,000 to be remitted. In addition, such officers almost certainly spend when on leave more than their current pay, in which case a 50 per cent. addition would make the total £300,000. Most officers also remit insurance premiums and sums for their families or dependants. Evidence would suggest that this may be in the more healthy territories about one-sixth of their pay—in the case of Kenya and Uganda some £250,000. These figures are admittedly, in the absence of the necessary statistical data, no more than speculative, but they may perhaps serve to show the order of magnitude of the export surplus necessary to meet these requirements. For the particular circumstances of Kenya, with a civil service, part of which is local and domiciled in the territory, and with the unusual local opportunities for education, the total of £550,000 may perhaps be somewhat too high. But in any year before 1936 it must be doubtful whether, even with a substantial inflow of investment income from abroad, the balance of trade was satisfactory except with the support of continuous capital investment.

The importance of these invisible items makes the calculation of a balance for the West African territories from existing data even more uncertain. Nigeria had an export surplus of £4,643,000 in 1934 and £2,891,000 in 1936. Debt and pension charges required about £2,063,000 in the first year and £2,120,000 in the latter, leaving a surplus when these had been met of £2,580,000 and £311,000 respectively. The total of personal emoluments was about £990,000 in 1934. Of this it is possible that as much as £600,000 is spent on leave and home remittances. Even thus a large surplus remained in 1934 to cover the profits of trading firms and other outward payments, but in 1936 there was almost certainly an adverse balance. The Gold Coast, with an export surplus of £3,269,000 in 1934 and £980,180 in 1936, and debts and pensions a little under £1,000,000, has probably in most years a safe

margin. Sierra Leone, with debt and pensions charges of about £157,000, and leave and remittance expenditures which may well be as high as £100,000, had in 1934 a surplus of only £207,000, but by 1936 this had risen to £1,030,250.

An adverse trade balance is not necessarily a sign of danger. A vigorous and rapidly developing territory in which current foreign investment exceeds the interest payments on the past investment will normally show a surplus of imports. Northern Rhodesia in 1931, at the height of the period of construction of the new copper mines, had an adverse visible balance of almost £5,000,000, when exports were still below £1,000,000. But in the absence of active investment it must be a matter for concern. Knowledge of the existence of an adverse balance may serve to forewarn an administration of a coming decline in imports and customs revenue, and of more general difficulties of industry and agriculture.

VII. STATISTICS

The Union of South Africa has a well-equipped Statistical Department, and Southern Rhodesia has commenced the organization of a statistical service. As a general rule, however, the full statistical data required to guide administrations in their economic policy are seldom available in Africa. A very high level of statistical perfection requires, there is no doubt, an expensive staff and meticulous accuracy of detailed work, such as is not easily obtained from African subordinates. Some territories have been led by a desire for economy to dispense with the services of a trained statistician or to refrain from appointing one. How far this is a true economy must depend upon local circumstances, but it must be remembered that the revenues and expenditures which have to be controlled are very large in comparison with the salary of such an official, and the difficulties of making satisfactory decisions in the absence of necessary information are, as the Kenya Economic Development Committee has indicated,¹ very great. But if the highest level of statistical perfection is unattainable, it is nearly always helpful to know the probable order of magnitude of the factors involved in some situation. An intelli-

¹ *Report of the Economic Development Committee, 1935, pp. 143-7.*

gent estimate, based on such evidence as may be made available at reasonable cost, will often provide a sufficient guidance for practical purposes, and is greatly to be preferred to none at all; but it must be an estimate made by one who is accustomed to deal with material of this nature. In the particular case of the balance of payments, the items that are sufficiently large to be worth considering could probably all be estimated within limits of probable error narrow enough to indicate whether or not administrative action of one kind or another was necessary.

The existing statistics of many of the territories might, however, in some respects be considerably improved without added expenditure. No useful purpose would be served by retailing here the many irritating deficiencies and inconsistencies which have been encountered during the preparation of these chapters; it is enough to say that eccentricity, so interesting in social life, loses its charm when applied to the compilation of trade statistics. More serious defects are concerned with conflict between the intentions announced in the explanatory notes of trade tables and their subsequent performances in the official blue books. This in particular affects the treatment of government imports. A problem that certainly requires careful consideration is that of the form in which the original data are made available to the general public in Colonial Reports and the Economic Survey of the Colonial Empire. In a number of the African territories the entrepôt trade is considerable. Thus the gross import figures may greatly overestimate local consumption, and an aggregate of import figures of a number of territories may count a by no means negligible proportion of the total imports more than once. It would be most valuable if the import and re-export tables could be combined for each territory to indicate the retained imports. Failing this, it would appear to be very desirable not to publish the import figures without making available also the re-export figures, and to modify figures of imports per head of population to show the net retained imports per head only, since the gross imports per head have no useful significance. These are, however, minor points, and there must always remain many pitfalls for an unwary reader,¹ such as

¹ See G. L. M. Clauson, 'Some Uses of Statistics in Colonial Administration', *Manchester Statistical Society's Journal*, Jan. 1937.

the difficulties involved in the valuation of exports produced by companies owned and controlled outside the territory.

In the non-British territories the chief difficulties of statistical analysis have arisen from the somewhat inconsistent indication of countries of immediate consignment of exports and of ultimate destination. Wherever knowledge of the ultimate destination is available, this is, from the point of view of every possible user of the statistics, the more valuable information, and even if occasional errors are involved, they almost certainly will not exceed those which must arise in any subsequent attempt to adjust countries of consignment so that they may indicate the ultimate destinations.

VIII. GENERAL CONCLUSIONS

These deficiencies of the statistics, however troublesome, are not sufficient to invalidate the general picture of Africa's present position in relation to the world economy. As compared with the thickly peopled continents of the northern temperate zone it is, and must for a long time remain, relatively unpopulated, and its share in world trade relatively small. Its progress and absorption into the world economy has been closely related to mineral discoveries. In their absence, capital investment in development projects has been risky and often unprofitable. In the absence of minerals, the great distances, small traffic, and high consequent capital and operating costs for consignment make transport costs heavy and agriculture relatively unprofitable, although in a few areas, especially on the West Coast, the combination of a more dense settlement and of a valuable cash-crop has brought comparative prosperity. Outside these areas both European and native derive from agriculture a subsistence which, though usually sufficient, is subject to many vicissitudes from climate, and from crop and animal pests. This continent, to a greater degree than almost any other, has relied upon foreign capital for its development, and it is of some interest to note the dominating position which British capital has taken in the process.¹ The inward flow still continues. It has helped to transform parts of Northern Rhodesia within the last decade. But it has not, save possibly in one or two instances, served to create an economy which is

¹ See S. H. Frankel, *op. cit.*, chap. i, pp. 16 ff.

dependent upon its continuance, and in many of the African territories the initial period of intake of capital is now replaced by an outflow of goods sufficient to meet the interest charges.

Save in respect of the Union of South Africa, it is not possible to forecast the time when any of the territories will be able to undertake the process, now well advanced in India, of converting its foreign obligations into internal debt, or of producing locally the capital required for further industrial development. If further capital is needed by these territories it must continue to come from outside; but it is not easy to estimate the demand which they are likely to make in this respect. The annual investment in Africa has, indeed, been greater during the last decade than during almost any other period, and new mineral discoveries may at any moment attract yet more capital. But, that apart, the development of the agricultural areas of Africa by railway building would appear almost to have reached finality at existing rates of interest, given the existing method of cultivation and the present state of development of world markets. The consideration of the abandonment of existing branches would even suggest that operating and depreciation costs, apart from capital charges, are, in some cases at least, beyond the capacity of existing or probable traffic. As has been suggested elsewhere,¹ there are, south of the Sudan, few irrigation projects of any magnitude which need financing by foreign capital, unless indeed experience of the scheme now approaching completion on the Niger² proves that other works of this description can profitably be undertaken in the same locality. It has been suggested³ that in these circumstances the proportion of equity capital investment is likely to increase, and that in the Union, in West Africa, and certain other areas there will be a further growth of such private capital investment as falls under the definition of 'non-listed' capital. There is, indeed, some ground for doubting whether the large increase in funded debt incurred by some of the colonial areas since the War has not created so high an interest charge as materially to restrict the possibility of their entering on fresh loan commitments. The British territories have increased their debt charges by 800 per cent. over the figure of

¹ See Chap. XV, pp. 1025-6.

² *Ibid.*, pp. 1049-51.

³ S. H. Frankel, *op. cit.*, chap. vi, pp. 421 ff.

1913. Between 1927 and 1934 the Belgian Congo increased its debt fourfold.¹ The character of the burden was fully appreciated during the recent period of depression; at such a time, the service of the public debt places a relatively higher burden on such funds as are available, since an increased proportion of the curtailed income of the state has to be sent abroad. An analysis of the public debt of the British colonies and protectorates shows that, while a large proportion of the expenditure against loan funds has been incurred on railways or other undertakings of a revenue-producing character, there remains a proportion which has been expended on road communications, buildings, health measures, or on the funding of revenue deficits. A considerable part of the expenditure against the French colonial loan of 300 milliard francs has been on road communications and similar objects, the loan having been explicitly linked up with the policy of *mise-en-valeur*.

There is, no doubt, much to be said for the orthodoxy of a government, like that of British India, which has so arranged its finances that the greater part of its public debt can be said to be secured on revenue-producing assets. It is at all events satisfactory that certain of the African administrations, whose revenues have been rehabilitated by the return to higher price-levels, have initiated a Revenue Reserve Fund, in order to meet the cost of development measures as far as possible from revenue, and thus avoid a resort to the loan market for expenditure of a technically 'unproductive' type. It is not necessarily contrary to the canons of good finance to incur 'unproductive' expenditure from loan funds; it is, for example, a common practice everywhere among local government bodies. The only test is that of ordinary prudence. Given conditions which are not unduly subject to climatic vicissitudes, and a population with an improving taxable capacity, expenditure of the 'unproductive' type can safely be incurred from loan funds, especially if it be on objects such as road communications, measures to control epidemic disease, or improvement in agricultural methods, which tend indirectly to improve the capacity of the taxpayer. But the recent period of depression proved that, with a few exceptions, the African colonial admini-

¹ S. H. Frankel, *op. cit.*, chap. v, p. 191.

strations could not be said to comply with these conditions.¹ Much of their customs revenue is derived from articles with which the native can readily dispense in time of scarcity or price depression;² and the direct tax on natives clearly does not lend itself to the rapid adjustments which may be needed in order to repair deficiencies in public finance.³ The economy of some of the governments is, moreover, so far linked up with the trade position of a single, or perhaps two, export crops,⁴ that their public finances must always be subject to hazards on which it is difficult to calculate. If, however, such administrations cannot properly look to loan funds for development expenditure, and must rely on their ordinary revenues for the purpose, it is obvious that their progress will be materially retarded. There are many who contend that the financial obligations of a colonial power towards an African dependency are not discharged by merely allowing it access, with or without a guarantee, to the money market of the home country; in their view, the real test of the faith of a colonial power in its capacity to improve the condition of a dependency is its willingness to give to the latter the financial support which it needs in its development. It is an obligation which was fully recognized by some of the colonial powers in the earlier days of their rule, as is shown by the extent of the contributions mentioned earlier in this chapter.⁵ Direct assistance is, however, now limited in the British territories to grants from the Colonial Development Fund, which are now given only for expenditure of an unusual type, such as would not ordinarily fall on the colonial budget; the subvention

¹ This problem has been discussed in relation to many African territories, notably by Sir Alan Pim for Kenya, *Report of the Commission to Enquire into and Report on the Financial Position and System of Taxation of Kenya*, Colonial 116, 1936, pp. 19-22, and for Northern Rhodesia, *Report of the Commission appointed to Enquire into the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, pp. 93-6 and 341; by Sir S. Armitage Smith for Tanganyika, *Financial Mission to Tanganyika*, Cmd. 4182, 1932, pp. 45-52; for South-West Africa in the *Report of the Commission on the Economic and Financial Relations between the Union of South Africa and the Mandated Territory of South-West Africa*, U.G. 16, 1935, pp. 34-5, 87, and 130-3; for the Belgian Congo by the Governor-General, M. Pierre Ryckmans, *Annuaire de documentation coloniale comparée*, 1936, vol. i, p. 11, and *La politique coloniale*, pp. 91-5; for French West Africa more briefly by M. de Coppet, *Discours prononcé par le Gouverneur Général à l'ouverture de la session du Conseil de Gouvernement*, Dec. 1936, p. 28. See also, S. H. Frankel, *op. cit.*, *passim*.

² The customs revenue of the British territories in Africa, excepting South Africa and South-West Africa, fell from £10,773,000 in 1929 to £7,217,000 in 1931. (S. H. Frankel, *op. cit.*, Table 39).

³ For Direct Tax, see Chap. X, pp. 554-602.

⁴ See above, pp. 1327-8.

⁵ See above, pp. 1317-21.

given by Belgium to the Congo Government was designed as a temporary measure in order to repair some of the losses caused to the colony by the depression.¹ It is not unreasonable to hold that there are certain types of expenditure, such as communications, the provision of water supply or of health services, in which a colony with inadequate resources of its own might look for some definite assistance from the funds of the colonial power. As an alternative to a direct grant, it might be feasible to consider the making of a loan free of interest for a term of years, subject to further consideration as regards interest at the end of that period, such as those made by the British Government to Tanganyika. It has been suggested in the course of this chapter that the terms on which loans have been obtained by certain of the African dependencies, particularly in the period following the War, were such as to bear unduly hardly on their finances. There is some ground for feeling that not only this question, but that relating to the principles which should regulate the relations of the colonial power and its dependencies in the matter of grants for assistance towards the ordinary expenditure on development, should receive a more comprehensive examination than has yet been given to them.

¹ See Chap. XX, p. 1454.

CHAPTER XX

THE INTERNAL ASPECT OF AFRICAN ECONOMIC DEVELOPMENT

I. INTRODUCTION

THE preceding chapter was concerned with the economic development of Africa in its external aspect. The present chapter is concerned with the internal economic problems set in motion by capitalistic development, by the creation of new facilities for transport, and by the introduction of new techniques and new tastes.

It has been common, in studying problems of economic change in Africa, to distinguish two general types of organization: the original primitive economy on the one hand, and the new European capitalistic economy on the other. While for many purposes this broad distinction will suffice, in any attempt at a detailed examination of individual territories it becomes apparent that this simple dichotomy is an over-simplification of the many complexities of the actual inter-relations of the new and the old. It will perhaps help to clarify these relations if the various forms in which the European may collaborate with the native are first briefly considered. The European may provide the knowledge of the technique of production; he may provide the organization, discipline, and control; he may provide the capital necessary for equipment and works, for carrying finished or unfinished stocks, or for financing growing crops; he may provide the skilled operation of certain processes beyond the present capacity, at least, of the African native worker; he may provide marketing facilities for native crops or products; he may provide transport facilities for carrying native goods to their places of sale or consumption. Quite obviously the economic systems of Africa do not divide themselves into those in which the European performs all these functions and those in which he performs none of them. In many of the areas in which a casual commentator might say that the primitive economy still prevailed, Europeans will in fact be found to provide transport facilities, marketing facilities, and capital for carrying goods while in

process of being marketed, and thus to be modifying in greater or less degree the purely primitive economy.

As indicating broadly the form and extent of European penetration into the economic system, it may thus be convenient to distinguish five general types of economy discoverable in Africa to-day. The first is that of the Union, outside its native reserves, and of certain parts of the Rhodesias, Kenya, Tanganyika Territory, and Nyasaland, where permanent European settlers own and occupy land, while Europeans or Asiatics largely operate the main industries, and the activity of the native is limited to that of providing unskilled or occasionally semi-skilled labour. The second type of economy is distinguishable from the first only by the permanence and proportion of the European population. It is that which is associated with mining in many parts of Africa, even outside the areas of settlement. It is associated in certain territories also with the production of plantation crops. The European provides capital, technical management and organization, and marketing and transportation. The native performs such tasks of skilled and unskilled labour as may be within his capacity. In the third type of economy the European provides capital, transportation, marketing, and possibly certain preparatory processes; the native is responsible, possibly under some supervision, for primary production. Examples of this type of organization may be discovered in the Gezira scheme of the Sudan Plantations Syndicate, or in the irrigated areas of the Niger in French West Africa.¹ Fourthly may be distinguished the type of economy in which the native population undertakes and finances the primary production without any consistent non-native supervision, and the non-native's functions are confined to the marketing and transportation of his products. Such, for example, would be the case with the production of cotton in Uganda, or cocoa in the Gold Coast. In some instances, through native-owned lorries and native-controlled co-operatives, the contribution of the European to the trade within Africa itself may be reduced to relatively small dimensions. Finally there is the primitive subsistence economy, modified only so far as peace, taxation, and the growth of new wants have enforced change.

¹ See Chap. XV, pp. 1049-51 and 1053-5.

II. THE EUROPEAN ECONOMY

(a) *The Union of South Africa and the High Commission Territories*

Since the development of the modern economy, more particularly as regards the permanent settlement of Europeans and the ownership by them of a large part of the land, has proceeded further in the Union of South Africa than elsewhere,¹ and lessons derived from its experience may be applicable to existing situations in other territories, it is convenient to start from an examination of its problems. The difficulties both of a theoretical study and of the practical economic administration of the Union and the surrounding territories arise largely from the fact that it is not one single homogeneous economic system, but what may, indeed, be described as two systems, whose mutual relations are indefinite and progressively changing, and which cover areas that are not easy to define. Economic boundaries are by no means so coincident with political boundaries in Africa as they are to-day in Europe. Labour, in particular, moves with comparatively little impediment from one territory to another, and these relatively undeveloped units are more closely interdependent both for manufactures and foodstuffs than are adjacent countries in the longer-settled and more densely populated parts of the world. But for practical purposes it is convenient to treat them separately so far as that is consistent with reality. For the moment we shall be concerned only with the Union of South Africa itself and with the High Commission Territories, which lie within or are adjacent to its borders.

Within this area there exist concurrently one economic system that has predominantly European characteristics, though by no means exclusively a European personnel, and a second economic system originally with native characteristics, though in process of modification by contacts with the European. While the European system is in the main single and homogeneous, the native system is rather composed of a number of almost independent geographical units not very closely related to each other. Though these two systems are analytically distinct, individual natives move frequently from one system to the other. It is with the extent and

¹ See Chap. XII, pp. 814 ff.

causes of such movement that any study of the economy of South Africa must be primarily concerned.

The dimensions of the European system are not easy to state with accuracy. In the chapter dealing with labour, reference was made to the estimate made by Professor Grosskopf for the census year 1921, in which he calculated that some 856,000 natives were occupied in the modern economic life of South Africa.¹ Until the detailed results of the 1936 census are available, no exact calculation of recent growth is possible, but during those fifteen years the number of male natives resident in urban areas has increased by 95 per cent., of those occupied in industry by about 28 per cent., in mining by about 46 per cent.; in agricultural work the number had apparently risen by 1930, when the last available census of agricultural labour was made, by about 20 per cent.² An estimate based on such figures as are available would suggest that the number of natives occupied in the European economic system in 1936 was approximately 1,250,000. This must not be regarded as implying that any such number have finally severed all connexion with the primitive economy. The figure includes a very large number of natives who are no more than temporarily engaged in various occupations. But when they return to their homes, their places will be filled by others and the proportions of those occupied in the two systems will not be materially altered. The figure of those engaged in the modern economic life of South Africa includes all those natives from other territories who were working in the Union at the time of the census. Of these there were some 92,000 at the end of 1935 working in Kimberley and in the Rand labour districts alone. The number of women engaged in industry proper, as apart from those employed in domestic service or on farms, is probably negligible.

Apart from the Bantu there are two other groups associated with the Europeans in the modern economic system, the Asiatic population, concentrated chiefly in Natal, and the coloured population, concentrated chiefly in the Cape. In 1921 the total Asiatic population of 165,731 included 57,403 males over 18 years of age. Of

¹ See Chap. XI, p. 606.

² Some caution is needed in combining figures derived in one case from the population census of 1921, and in the other from the agricultural census of 1930. A part of the growth is possibly explained by a difference of classification.

these 19,478 were occupied in agriculture, 12,046 in commerce, and 6,066 in personal service. The coloured population, numbering in all 545,548, included 143,713 males over the age of 18. Of these almost exactly half were occupied in agriculture. The building and allied trades gave employment to 8,260, and personal service to another 8,988. Coloured girls have also found employment in large numbers. A little over 50,000 were occupied in domestic service; small numbers were engaged in industrial occupations, some 1,400 being employed in the clothing trades.

During the period 1921-36 both these sections of the population have considerably increased in numbers. The number of Asiatic males, largely as a result of immigration, has increased by 47.29 per cent., and that of coloured males by 41.15 per cent., in comparison with an increase of native males of 41.83 per cent. and of European males of 33.68 per cent. But whereas the coloured rural male population had increased by only 19.7 per cent., the urban had increased by 69.2 per cent.; and while the Asiatic rural male population had declined by 38.6 per cent., the urban had increased by 141.4 per cent. The numbers employed in factories have in neither case shown any marked increase, and in recent years have, indeed, tended to decline slightly. It would appear, therefore, that they have been absorbed partly by commerce, partly by personal service, and partly by occupations not covered by the industrial census.

In the year 1921, then, some 453,000 European males over the age of 18 were associated in the modern economic system with some 856,000 natives, 144,000 coloured, and 57,000 Asiatics, approximately 1,510,000 in all. By 1936 some 638,000 Europeans were associated, according to the foregoing estimates, with some 1,250,000 natives, 200,000 coloured, and 72,000 Asiatics, approximately 2,160,000 in all.¹ Thus the modern system had grown as regards the numbers of persons dependent upon it by about 43 per cent. during the fifteen years, that is by almost 3 per cent. per annum.

Though there has been no very marked change in the proportions of the four racial groups concerned, this rapid growth of activity in the modern economic system has inevitably thrown

¹ See Chap. XI, p. 606.

great strains upon all the various participants in it. In particular the balance between agriculture and industry has been disturbed. There has, it is true, been a very marked increase in the total of agricultural production. The area under cultivation increased by about 38 per cent., and the volume of exports of agricultural produce by about 41 per cent., between 1921 and 1935. But South Africa has shared during this period in the general depression that has affected agriculture throughout the world, and has suffered peculiar troubles of her own through drought and disease. Thus the prices of agricultural exports, which in 1920 had been 209 per cent. above the average of 1909-13, had fallen in 1921 to about 21 per cent. above that of those years, and after a recovery during the years 1923-9, sank in 1930 below the average of 1909-13, reaching a bottom point of 40 per cent. below in 1932. Thus, despite the general growth of agriculture, farming as a whole was less able than it had been in the past to support either a working or a dependent population which was not making an economic contribution equivalent to its cost, and individual farmers were driven into bankruptcy and poverty. The inevitable result was a drift to the towns of many hundreds of persons who were ill fitted both by character and training for the conditions of town life and the struggle to earn a living in industry or commerce.¹

The decline of agricultural prosperity was doubly important because of the very large part that it had always played in South African economic and political life. Until the discovery of diamonds in 1867 the economic development had been almost exclusively agricultural. The mining enterprises of the following years were in many respects a foreign growth. To the older agricultural population they afforded at first markets, rather than fresh occupations. During the subsequent half-century the earlier racial division between town and country dwellers, never by any means complete, has largely disappeared. But even at the 1926 census 61·3 per cent. of males of Dutch South African parentage were to be found in rural areas, and no more than 38·7 per cent. in urban areas, while of those of British stock only 20·8 per cent. were living in rural areas, and as many as 79·2 per cent. in urban areas. Though persons of Dutch South African parentage accounted for

¹ See Chap. XI, pp. 684 ff.

56.9 per cent. of the whole population, they accounted for slightly under 30 per cent. of the population of Johannesburg and the neighbouring Rand towns. Thus one at least of the two stocks which provide the majority of the white population remains even to-day predominantly rural and agricultural, and over large areas the other also is vitally concerned with agricultural occupations.

Agriculture is, moreover, by far the greatest single industry of the country. At the 1926 census, of 559,754 European males in different occupations, 172,643, just over 30 per cent., were occupied in agriculture. Mining gave employment to only 22,434. Transport, commerce, mining, building, and metal-working together employed fewer than did agriculture alone. The drift of the agricultural population to the towns, and the associated 'poor white' problem, has therefore been a matter of grave concern to successive administrations in the Union. The investigations of the commission financed by the Carnegie Corporation, to which detailed reference has been made in the chapter on labour,¹ would seem to show that the poor whites may be said to represent a population group of about 220,000 persons; the migration to the towns has been the consequence of lack of opportunity for employment in rural areas rather than of its existence in urban areas. Moreover, the majority of those who found their way to the towns were entirely unfitted for occupation in the urban industries.

The natural inclination to treat the growth of a class of poor whites as an agricultural problem, and to diminish the movement to the towns, has been reinforced by a recognition of the wasting nature of the mining resources upon which much of the national prosperity has been built. It was calculated by the Low Grade Ore Commission of 1930, with the assistance of Professor Frankel, that about one-half of the population of the Union was at that date supported by the gold-mining industry of the Witwatersrand, and that about half the government finances of the Union were derived, directly or indirectly, from it.² While the basis of this calculation has been criticized in detail, the main conclusion regarding the importance of gold mining to the whole economic structure of the

¹ *Report of the Carnegie Commission on the Poor White Problem in South Africa*, 1932, part i; and see Chap. XI, p. 685.

² See S. H. Frankel, *Capital Investment in Africa*, 1938, chap. iv, p. 115.

country cannot be called in question. Yet in 1930 the estimated reserves of the thirty-one producing mines and three developing mines, that were members of the Chamber of Mines, were only equal to about eleven years' output at the then current rate. The whole basis of the economic life both of the wealthier sections of the white population and of the poverty-stricken native reserves was threatened, and the most lucrative market of the agricultural population was in danger of collapse.¹

The abandonment by the Union of the traditional gold standard in 1932, and the rise in the price of gold, partly consequent upon that, partly upon the devaluation of gold-standard currencies, have now fundamentally changed the situation. The life of existing mines has been greatly prolonged, and in addition extensive new areas have been surveyed and developed. Moreover, the method of taxation of the mines has been so calculated as to encourage the mining of low-grade ores to a greater extent than can probably be justified by the maximization of immediate profits, though such a policy of preferring future to present benefits may well be regarded as legitimate in the circumstances of a nation living by the exploitation of wasting assets. No satisfactory estimate of the life of the gold mines is available, or indeed possible, in the new conditions. It has undoubtedly been very greatly extended, and the threat of early collapse has certainly been removed. But though the immediate urgency of the problem may be much diminished, it remains true that the economic system is largely built upon an asset with a terminable life, and if even a century of respite is granted, that is not long in the history of a nation. The encouragement of other forms of industry, the mining of base metals, the development of agriculture, can now be more deliberately and systematically pursued in preparation for the time when South Africa will no longer be able to depend upon the rapid exploitation of a mineral for which the world has hitherto afforded an insatiable demand, and which is hampered in international commerce by far fewer obstacles than is any other product.

These motives have led to attempts to deal with the poor-white problem at the source, by making agriculture more profitable and

¹ For a further discussion of the gold-mining industry see Chap. XXII, pp. 1487 ff.

more able to support both workers and dependents. The methods employed have been various. A Land and Agricultural Bank had been established in 1912 to facilitate the supply of capital both to individual farmers and to agricultural co-operative societies.¹ Loans may be obtained for improvements, for the purchase of stock, for the establishment of rural industries, for fencing, water supply, and various other purposes. The total advances made by the Bank amounted at the end of 1934 to about £15,000,000, more than nine-tenths of which was advanced to individuals. The Bank has been used from time to time by the Union Government as an agency for the distribution of relief to distressed farmers. In 1924 advances amounting to about £418,000 were made to farmers who lost stock or crops through drought. Within the following ten years all save about £30,000 had been repaid. Similar advances were made in 1927, and special advances to tenant and to landless farmers in 1926, 1930, and 1933. In addition to the facilities provided by the Bank special loans have been made available for farmers during the recent depression. An Act of 1931 provided means to farmers of meeting pressing liabilities through borrowing from a board created for the purpose, either by mortgaging land or by hypothecating crops or stocks. During the following three years over £4,000,000 were borrowed from the board at a rate of 5 per cent. per annum.

An Export Subsidies Act was passed in 1931 to mitigate the effects of competition from countries with depreciated exchanges before the Union itself left the gold standard, and to diminish competition in the more profitable home market and improve prices there by encouraging the export of agricultural products. This, with subsequent amendments, permitted a subsidy not exceeding 25 per cent. (or in the case of beef and mutton 35 per cent.) of the f.o.b. price of the product. By the end of 1935 no less than ninety-six primary products were covered. The actual subsidies paid were in many cases below the permitted maximum. The subsidies have been progressively reduced since 1935 and were finally discontinued at the end of 1937. In all some £10,000,000 had been paid out up to the end of August 1936. Of this almost exactly half was accounted for by a subsidy on wool exports, fixed originally

¹ See Chap. XII, pp. 815 ff.; Chap. XXI, p. 1468.

at 25 per cent. Citrus and deciduous fruit had received a little short of £2,000,000, while on meat less than £250,000 had been disbursed.

In addition to these export subsidies paid by the Union Government there have been, in the case of several primary products, export bounties, administered by control or advisory boards, and financed out of levies imposed upon all producers. Control Boards were created for the live-stock and wheat industries, for the dairy industry, for maize, wheat, and tobacco, and advisory boards for wool, hides and skins, and eggs. Export bounties have been paid on slaughter stock, butter, and cheese. The funds of the other boards have been used to create marketing, advertising, and research organizations. In the case of maize, an export quota percentage has been fixed annually, and every trader has been required to provide for the export of a quantity of maize equal to that percentage of his purchases.

Finally, in 1936, there was introduced a Marketing Act designed to establish a unified system of agricultural marketing in all the various branches of agriculture. Under the supervision of a Marketing Council and of the Minister of Agriculture, control boards for separate products are empowered to buy and sell produce, and thus control internal distribution and export, to fix quotas and prices, determine standards of quality, and regulate inspection and grading. Most of the earlier control boards have been reorganized in order to take advantage of the provisions of this Act.

Apart from these more direct forms of assistance to farmers, the railway rates, which have always been framed to help the agricultural community, have in recent years been further adjusted to cheapen the shipment of live-stock and of dead chilled meat, and more recently of wool and fresh fruit. The government has undertaken to refund to the Railway Administration the cost of the rebate.

By such means the condition of the farming population has been considerably improved, and the drift to the towns somewhat diminished. But there has remained a serious problem of urban European unemployment. It has been sought to mitigate this, partly by providing relief works, partly by encouraging the use

of European rather than native unskilled labour in certain employments.¹ The effects of this policy were discussed by the Economic and Wage Commission of 1925. The General Manager of the South African Railways and Harbours, in evidence submitted to that Commission,² claimed that the policy was justified in that 'thousands of men who would otherwise have drifted into the ranks of the irreclaimable have been able to regain a place amongst the self-supporting and self-respecting sections of the community'. He was not prepared to state precisely how much extra cost was imposed upon the Railway Administration by the employment of white labour. While in general terms it could be said that white employees cost about twice as much and were some 15 per cent. more efficient than natives, it was obviously necessary in many cases to replace one native by one European. But the amount of supervision required was less.

This 'civilized labour' policy³ has been criticized, both by those who have regarded it as an impediment to the most economical employment of African resources, and by those who have been concerned with the limitations that it has imposed upon the welfare of the native population. But no judgment of it is possible, unless certain fundamentals of South African economic development have first been postulated. A policy that is 'uneconomic', if the end in view is the maximization of the welfare of a single and unified economy of both native and European populations, may be 'economic' if the end is the growth of a primarily white community. The practical issues that led to the formulation of the policy were those arising from the competition of unskilled white labour with native labour, prepared to accept almost indefinitely low wages, since even so their circumstances were no worse than they would be in the poorer of the native areas. The white community was prepared to say, as other communities have said with regard to unemployed persons, that there was a minimum standard below which it was not willing to see unskilled fellow whites fall. It might have

¹ See Chap. XI, p. 685. It has been stated that while the European staff of the railways had risen from 39,024 in 1924 to 48,856 in 1935, the non-European regular staff had fallen from 47,157 to 19,923; see W. M. Macmillan, *Complex South Africa*, 1930, p. 109, and *Official Year Book of the Union of South Africa*, 1937, p. 499.

² *Report of the Economic and Wage Commission (1925)*, U.G. 14, 1926, para. 163.

³ See Chap. XI, pp. 682 ff.

said that if work were not forthcoming at that wage it would grant unemployment benefit. It has preferred to say that certain types of work should be reserved to white unskilled workers. Granted the assumption that white labour should not be permitted to descend to the level of income dictated by its efficiency compared with that of native labour, it is difficult to argue that such a policy is obviously 'uneconomic'. It involves the community, it is true, in expenditure greater than if it employed native labour and allowed its white unemployed to starve. It is by no means clear that it involves the community in greater expenditure than if it made the minimum practicable provision for its white unemployed.

But though there may be both political and theoretical justifications for the adoption of a civilized labour policy, its necessity must nevertheless be regretted. It is, of course, generally true that, except for short periods, employers will not continue to employ workers unless the value that they contribute to saleable products exceeds the wage which they demand. The value of the work of the unskilled white worker has been limited not only by the market value of the final product, but also by the share of it that has been demanded by more skilled European workers. Making use of a strong bargaining position, the more skilled workers have been able to secure for themselves a disproportionate share of the whole product at the expense both of the less skilled Europeans and of native workers.

It has been frequently pointed out, and in particular by the Economic and Wage Commission of 1925, that the spread of wages in the Union is very wide, both within an industry and between one industry and another.¹ The ratio of skilled to unskilled wages varied, they found, according to trade and locality from about eight to one to about three to one. In England the ratio was, and still is, approximately fourteen to ten in building and engineering, and not widely different in other industries. This high level of skilled wages cannot be explained by greater productive capacity or by the high level of the total income of the country. Real wages of adult European workers in the building industry

¹ For some examples of this see Chap. XI, p. 683. The Commission showed that in a given occupation the customary wages of local artisans in many country towns have been one-half of the ruling wages in the chief towns, *Report*, op. cit., U.G. 14, 1926, pp. 12 and 260.

were calculated to be higher than those in Australia in two of the five years 1929-33, higher than those in New Zealand in all five years, higher than those in the United Kingdom in all years by amounts varying between 17 and 29 per cent.¹ They were in 1925 (and the changes in more recent years have not been so great as to invalidate the comparison) some 55 to 65 per cent. higher than real wages in Berlin, Brussels, or Paris.² It was the opinion both of the majority of the Economic and Wage Commission of 1925³ and of the Customs Tariff Commission of 1934-5⁴ that real wages in South Africa were high relatively to the country's capacity to pay wages. The Economic and Wage Commission estimated the value of the total income of European industry and agriculture in 1923 at a little under £180,000,000. A reasonable estimate of the number of natives dependent upon it (2,900,000 out of 4,700,000) would make the income per head of *all* persons (as distinct from occupied persons) about £35. The comparable figures for Canada and Australia at about the same date were £100 and £78, for the United Kingdom about £80, and for France and Germany about £45 and £52 respectively. It would seem clear, therefore, that the exceptionally high wages of skilled craftsmen are derived not from a high general level of production, but from the opportunity that has existed in South Africa for that class to raise their own incomes by depressing those of others. The classes that have suffered have been, beyond question, the unskilled Europeans and the natives.

But the effects have not been confined to a distribution of wealth markedly different from that in most other countries. The high rates of wages that have been demanded by skilled labour and enforced partly by trade-union bargaining, partly by the awards of the Union Wage Board, have made it difficult for South African secondary industries to compete with imported products, except where the natural protection of high transport costs or perishability is great, or where actual protective duties have been imposed by the government and have checked or delayed the growth of other employment.

¹ *Official Year Book of the Union of South Africa*, No. 17, 1934-5, p. 203.

² *Report*, op. cit., U.G. 14, 1926, p. 27.

³ *Ibid.*, p. 34 et passim.

⁴ *Report of the Customs Tariff Commission, 1934-5*, U.G. 5, 1936, para. 346.

In the absence of protection in some form or another, South African imports must necessarily have been limited to that volume for which the country could pay with the products of those export industries, more particularly gold, diamonds, and certain branches of agriculture, which could survive in the face of the high level of local costs. Any uneconomic rise of wage-rates would result in unemployment in South Africa, and a consequent diminution of incomes, until the imports had again been brought within the limits set by South Africa's capacity to pay.

The economic system was thus condemned to run at half-pressure so long as South African wages were maintained at too high a relative level. The consequent unemployment took, however, a somewhat different form from that which it would take in a European country. The white workers who might in other circumstances have been employed in skilled and supervisory tasks have been forced to content themselves with less highly paid posts. The unskilled Europeans have been forced into more intense competition with native labour. The native labour displaced by this competition, and by the civilized labour policy consequent upon it, has been thrown back upon its own resources, and thus upon the production of its own native agriculture in the reserves.

Relief from this situation could be secured by several alternative means—by adjustment of wages, by currency depreciation, by a system of protection which would permit a higher level of internal wages and prices relatively to those of other countries, and by such reorganization as would increase the country's wage-paying capacity sufficiently to make the existing level of wages economically possible. The first two courses were for political and other reasons difficult to contemplate; the last, though by common consent desirable, would perhaps have placed an undue strain upon industrial and individual adaptability. Many observers would, nevertheless, have welcomed a greater reliance upon it. In the circumstances political pressure for protective duties was inevitable. In 1924 enlarged responsibilities were imposed upon the Board of Trade and Industries in regard to advising the government in matters of assistance to South African secondary industries, and in 1925 a revised tariff was introduced,¹ which, though historically an outgrowth

¹ *Official Year Book*, op. cit., No. 17, 1934-5, p. 617.

of the 1914 tariff, marks the beginning of a more distinct and purposeful attempt on the part of government to encourage the development of industry through the means of the customs tariff without, however, sacrificing the revenue consideration.¹ The declared objects of the tariff of 1925, as further amended in 1935, can be summarized briefly as being the assistance of already existing South African industries which, without such help, could not survive, so that they might develop into efficient and economic undertakings giving employment to increased numbers of persons on a civilized standard of living. They were to be industries, so far as possible, using local raw materials for manufacture into local consumption goods, or they were to be industries processing local export products, if such processing improved the position of the primary producers. So far as possible, duties were not to be imposed which would increase the costs of production of primary producers, more especially in mining or agriculture. Additional provision was made for protection against exchange dumping.

The success of this policy was examined by a Customs Tariff Commission of 1934. It reported that, to the best of its capacity to estimate, protection had given direct employment to some 26,000–28,000 Europeans and 21,000–23,000 non-Europeans. The further effects are more difficult to assess. If South Africa had enjoyed a full measure of employment, the growth of employment in the protected industries could be secured only by an equivalent contraction in other industries, and would imply a diversion of resources from more profitable to less profitable uses, which could be justified only on the ground that, by protecting certain industries, long-run benefits could be achieved which would outweigh the short-run losses. But in the existing circumstances of South Africa it was by no means clear that protection in every case implied a mis-direction of resources. If money wages were higher than production justified, recovery was, it has been seen, possible either by lowering wages or alternatively by raising prices without raising wages. Protection made possible a rise of local prices as an alternative to the reduction of wages. But it threw a heavy burden on many of the exporting industries. The gold-mining industry

¹ Memorandum submitted by the Board of Trade and Industries to the Tariff Commission, 1934, *Report of the Customs Tariff Commission 1934–35*, p. 115.

had in any case been helped by the change in the world price of gold, and while the existing level of South African costs somewhat diminished its capacity to give employment, it was not driven into such difficulties as other exporting industries. But agriculture required and received assistance in the form of export bounties, partly, as has been seen above, granted by the government, partly derived from industrial funds.

The final situation, though different in its effects upon those enjoying fixed incomes and upon the sheltered industries, was probably not in its short-run results so widely divergent, as has sometimes been suggested, from the alternative consequences of deflation and wage adjustment. The latter might, however, over a longer period have permitted an even greater expansion of gold mining than has taken place, an expansion which has been estimated by Mr. Gemmill, of the Transvaal Chamber of Mines, as being capable of yielding employment to a further 129,000 natives and 14,600 Europeans, as the result of a 10 per cent. fall in costs. It is, however, by no means certain that the whole of the increased cost of living due to the imposition of tariffs has been reflected in higher wages either of natives or of Europeans, or that the removal of protection would result in any equivalent reduction of wages and costs in the mines. A considerable rise in real wages of European mine-workers since 1925 has been mainly a consequence of the continuance of a relatively constant level of money wages in a period of falling prices. It is impossible to judge whether a further 10 per cent. rise in real wages would have enabled the mines to enforce wage reductions which they had hesitated to enforce when real wages rose 23 per cent. between 1925 and 1933. But there can remain little doubt that when all reasonable allowance has been made for the effects of increased costs upon mining and existing export industries and for any consequent maldistribution of resources, the protective policy has made quite a substantial addition both to employment and to the national income. That addition might, it is true, have been at least equally well secured by the alternative policy of deflation and wage reduction, but it could only have been thus secured in the face of very considerable opposition.

But though protection may have served somewhat to mitigate

the intensity of European unemployment or mis-employment and to diminish the competition with native workers, it has by no means removed the problem completely. The difficulties of individual Europeans in competition with African unskilled workers remain very real, and their alleviation one of the most acute practical problems of the Union. Broadly, two methods of dealing with the problems are available. The first is that of maintaining high European levels of earnings by colour-bar restrictions on the advancement of native workers. This method has, however, its limits. In South Africa profits, skilled wages, and unskilled wages share the total product in such proportions that skilled wages are approximately three times the average value of output per person employed. In England it is so divided that skilled wages are approximately equal to the average value of output per person. Since the share of profits is not markedly different in the two countries, the gain of skilled labour is largely at the expense of unskilled labour, that is, at the expense partly of native workers, partly of unskilled Europeans. The more the field of employment of natives is restricted, the more is the high level of skilled wages derived from the exploitation of the poorer Europeans. Ultimately the high-wage policy must conflict with the civilized labour policy and choice must be made between them. On the other hand, the greater the ratio of native labour to white labour, the better is the prospect that industry will be able to pay existing wages to European skilled labour, or wages not substantially less.

The alternative to the method of restriction is the method of expansion. It was suggested above¹ that the European's contributions to economic activity, whether in the Union or in other parts of Africa, may be divided under four main heads. He provides, first, the knowledge of technique; second, organization and discipline; third, capital; and fourth, skilled operation. With the exception of a few Indian and coloured owners of small factories, both the provision of capital and the organization of industry have remained almost exclusively in European hands. In any new and growing industry both the technical control and the operation of the more skilled processes require, as a rule, European assistance. But as an industry becomes established and the processes are

¹ See above, p. 1359.

reduced to a routine which, even if imperfectly comprehended, may be reproduced by rule of thumb, the need for European supervision is gradually reduced. In the Belgian Congo or West Africa native operatives have shown themselves competent in such circumstances to take over many semi-skilled tasks. Where that possibility exists some restriction on native advancement becomes necessary, if it is desired that the European shall retain his post at a rate of wages more than proportionate to his greater skill.

The only effective method of avoiding this necessity is by the opening up of new sources of demand for labour. It is in an advancing and expanding phase of industrial activity that the demand for such qualities as distinguish Europeans is greatest. If through the application of restrictions the advance is brought to a halt, native competition will almost certainly grow progressively keener, and restrictions will become at the same time more necessary and more difficult to enforce. If economic development can be pushed on more rapidly, not only will the demand for European labour be increased, but also that for native labour, and the field of competition will be narrowed. A policy of industrial expansion may, perhaps, require that the proportion of the whole income going to Europeans be reduced, but the total divisible income is likely to be so increased that their absolute share will be greater.

A policy of expansion requires in the first place adequate supplies of capital that will be invested in the expectation of a return which it is within the capacity of industry to pay. While actual shortage of capital has not been a serious handicap to South African development, the rate of return demanded has sometimes been beyond the probable capacity to pay of small and unestablished industries, chiefly, it would appear, because prospective yields in mining have set up standards of expectation with which more stable industries can hardly compete. It requires, secondly, a prospect that during at least an initial period wages shall not be fixed at a level beyond the ability to pay. In this connexion attention may be drawn to the recommendation of the Customs Tariff Commission¹ 'that it is urgently necessary to co-ordinate not only the activities of the Board of Trade and Industries and the Wage Board, but also those of the various other controlling bodies which

¹ *Report*, op. cit., U.G. 5, 1936, para. 349.

operate under the present system of State regulations of the country's economic life'. It requires, thirdly, that there should exist European labour possessing those qualities of knowledge and initiative that are needed for the expanding industries.

The Carnegie Commission has emphasized the importance of education as a means of improving the position of the poor white.¹ As native education and experience improve, competition must become more intense for Europeans who have no special industrial qualifications. It can be most effectively mitigated by the education of those qualities of responsibility and initiative which are as yet comparatively undeveloped in the native. The Carnegie Commission has emphasized also the damaging effects of restrictive policies upon the outlook of those that they are designed to assist.² 'It is insufficient', they wrote, 'if the State merely provides the European with employment without at the same time taking measures to ensure that those who are assisted in this way are spurred on to greater personal efforts and to improving their efficiency. . . . A policy of protection by reservation of work to the European should be treated as merely a measure of transition for a period during which the poor white is given the opportunity to adapt himself to new conditions in South Africa. It will be disastrous for the poor white himself if any protection given him is of such a nature that it results finally in impairing his ability to compete with the non-European on the labour market. With a view to the welfare of the poor white, the period of protection should be made one during which they are trained to greater efficiency than they often have now.'

There is another aspect of native competition which requires brief consideration. The fear of such competition is twofold. It arises partly from a desire that no European shall sink to the native level of living conditions, and partly from the fact that the present native level is one at which no European can maintain what is regarded as a decent existence. The former ground of fear can be removed only by making Europeans able to earn more than the natives. The latter can be removed not only by giving the European a differential advantage, but also by so raising the native

¹ Joint Findings and Recommendations, *Report of the Carnegie Commission*, op. cit., 1932, paras. 14-19, 31-7.

² Ibid., paras. 68-9.

standard of life that it will no longer be a level at which decent existence cannot be maintained. The higher are native standards of life in the urban areas, the less depressing will native competition be upon the poor white community. Moreover, the native is not only a competitor. He is also a consumer. If his earning capacity is raised, so will be his spending capacity. The progressive development of this great potential market must provide many outlets for profitable European employment. The competitive relationship between European and native workers has in the past been stressed, perhaps over-stressed. For some individual Europeans it will always be the predominant consideration. But in many respects European and native labour is, and will remain, collaborative. A greater emphasis on this aspect, and a greater development of industries depending upon such collaboration, appears to be in the interest both of individuals of the two races and of the community as a whole.

Since 1925 the policy of the development of secondary industries has almost certainly accelerated the rate of growth of the modern economic system. But the ratio of natives to European workers has not, as was seen above,¹ been materially altered. It may reasonably be expected that this policy will be maintained, and that the absorption of natives into the modern system will proceed in the future somewhat faster than the rate of population growth. Whereas in 1932 liquidations and reductions of capital had exceeded the investments in new companies and the addition to the capital of older companies, in 1933 the latter amounted to £15,000,000, in 1934 to as much as £36,000,000, and in 1935 to about £21,000,000. But even so rapid an expansion as this cannot be expected to eliminate immediately the fear of European unemployment and of native competition. The apparent need for restrictions on the field of native employment must continue, and there must always be individuals to whom it is a benefit.

Nor must it be thought that such restrictions are unique. In almost every country there is a pressure exerted either by trade unions or by public opinion upon the freedom of the employer to buy labour freely in the cheapest market. The problems presented by native competition have much in common, as has often been

¹ See above, p. 1363.

pointed out, with those presented in Great Britain by the inroads into the labour market, since the War, of female labour. In each case the long-run advantage lies in the direction of utilizing the new supplies of labour to increase the total production of the country. But in each case such adjustment must require a painful transition, with great hardship to individuals who have acquired skill which can no longer command what is regarded as an adequate wage. Almost every community does in fact attempt to achieve a compromise between the most rapid possible economic progress, to be gained by complete freedom to purchase labour in the cheapest market, and a measure of security and stability during the necessary period of transition, to be obtained by the countenancing of certain restrictions on that freedom. But there is always a danger, in South Africa as elsewhere, that the gain of the comparatively few from security may be allowed to predominate over the interest which the majority have in progress, so that for a controlled transition there may be substituted an increasingly artificial stagnation.

(b) *Southern Rhodesia*

The economic development of Southern Rhodesia is relatively recent. Some reference has already been made to various phases in the history of the Chartered Company;¹ in effect, it may be said that the fate of the Company's rule was determined when the early hopes of discovering gold on a large scale proved to be without foundation. The receipts of the Company from royalties and the like were inadequate to bear the growing cost of administration, and the progress of the territory was further affected by the Matabele rebellion of 1896 and the rinderpest outbreak of the same year. But there were many respects in which Southern Rhodesia profited from the existence of the Company. The latter was able to provide railway communications, and to undertake extensive experiments in stock-breeding and the like which, if they had been carried out by state agency, would have left the territory with a burden of fixed interest on its loan capital. Like the Union, Southern Rhodesia has a European population which looks on the country as its permanent home. The climate does not, as it

¹ See Chap. VI, p. 157; Chap. IX, pp. 376-7; Chap. XII, pp. 732-3.

does farther north, necessitate periods of recuperation in a more healthy environment. The high veld plateau, where European farming is mainly concentrated, is in ordinary years well watered, and free from many of the difficulties which confront farmers in the Union. But the territory has suffered difficulties of its own, many of them consequent upon the great distances which separate it from its markets, and upon the lack of any sufficient volume of local consumption to provide a ready outlet for other than the staple agricultural products in which international trade is possible.

Southern Rhodesia differs markedly from the Union, however, in regard to the relative proportions of its European and native population. Whereas in the Union there are approximately 3·3 natives to 1 European, the ratio in Southern Rhodesia is approximately 21·1 to 1. This greater disparity of numbers, and the more recent development of the territory, have meant that a far smaller proportion of all natives are engaged in work for European undertakings, or upon farms or in domestic service. Approximately 37 per cent. of the adult male natives of Southern Rhodesia are employed in the modern European economy as compared with 67 per cent. in the Union.¹ They are reinforced by large numbers of 'foreign' natives from Nyasaland, Northern Rhodesia, and Portuguese East Africa. Of the total number of 221,410 natives engaged in work for European undertakings in 1936, as many as 133,758 came from outside.²

Of the European population, which amounted in 1936 to 55,422, as many as 43 per cent. were resident in the two largest European centres, Salisbury and Bulawayo. Of the adult male Europeans in the territory, 22·3 per cent. were occupied in 1931 in agriculture, 10·0 per cent. in mining, 14·6 per cent. in transport, and 33·3 per cent. in other industrial and commercial pursuits. Mining, though the number of Europeans employed is not large, is from the aspect of the economy of Southern Rhodesia predominantly important. Of the value of exports of Southern Rhodesian produce, which in 1936 amounted, including the gold premium, to approximately £9,268,000, the gold export accounted for 61 per cent. of the whole. Other exports of metals and minerals, of which

¹ See Chap. XI, p. 690.

² *Ibid.*, p. 701.

chrome, asbestos, and coal are the most important,¹ raised this total to almost 80 per cent. of all exports. Of the agricultural exports of the territory the most important by far is that of tobacco. In 1936 the total value of tobacco exports was £710,863, of which unmanufactured leaf accounted for 87 per cent. The export of meat, almost exclusively destined for the British market, amounted in 1936 to approximately £158,000. This figure has grown greatly in recent years—it never exceeded £20,000 before 1933—but it is still no more than 1·7 per cent. of all exports. Citrus exports, also consigned chiefly to Great Britain, have declined substantially both in quantity and value during recent years, and amounted in 1936 only to some £22,000. The exports of maize were valued at £313,000 in 1936. But for that year the total agricultural exports did not exceed 9·8 per cent. of the exports of the territory, if gold is valued inclusive of the gold premium.

The mining of gold in Southern Rhodesia, in marked contrast to the Union, is largely in the hands of small workers, and, as explained more fully elsewhere, the development by small producers has been the basis of the policy of government.² While the activity of mining is important as the main source of the territory's exports, as contributing a substantial part of the revenues of the government, and as providing the most profitable market for the produce of agriculture and the secondary industries, it is not a large direct employer of European labour.³ The numbers employed in mining of all kinds rose, it is true, from 1,432 in 1931 to 3,094 in 1936. But even so they do not considerably exceed the numbers employed in transport, in commerce, or in public administration. The capacity of the territory to pay wages, salaries, and dividends depends, however, largely on the volume of primary production in mining and agriculture, and on the possibility of discovering profitable markets for these products.

As in the case of the Union, the levels of wages in sheltered industries, and more particularly in commerce and in transport, have been high. Their level had been dictated originally by the need to attract skilled or semi-skilled European workers to the territory,

¹ See Chap. XXII, pp. 1494–5.

² *Ibid.*, p. 1493. See also S. H. Frankel, *op. cit.*, chap. v, p. 238.

³ See Chap. XI, p. 690.

and even after the immediate need for an excess above similar rates elsewhere had disappeared, the relatively strong bargaining powers of the workers in these sheltered industries would appear to have succeeded in diverting to them a somewhat excessive share of the total income of the territory. The primary producers could for a time at least be exploited, paying more for consumable goods or receiving a smaller share of the final value of their products. This remained possible so long as existing farmers or industrialists remained solvent and prepared to accept what was left to them rather than go out of business. But there were signs during recent years, confirmed by the evidence of the Committee of Enquiry into the Economic Position of the Agricultural Industry of Southern Rhodesia of 1934, that the financial position of many of the farmers was becoming increasingly precarious. They have been assisted by a variety of measures. The poorer among them are rarely liable to income tax.¹ A Maize Control Board, established in 1931, and since somewhat modified in detail, has maintained differential prices in the home market on the one hand and in the export market and the market for feed for exportable cattle on the other. The Cattle Levy and Beef Export Bounty Act² imposed a levy on cattle slaughtered for local consumption and provided a bounty, to which the government makes a contribution, on exports of chilled, frozen, and boned beef, and on meat extracts. A Tobacco Marketing Act³ has limited by quota sales to the 'protected' markets, those of the United Kingdom, the Union, and for local manufacture, and has sought to stimulate sales in new markets. A marketing scheme for dairy produce provides for a levy upon all sales of butter and cheese, from which a bounty is paid upon exports. In addition steps have been taken to ease the financial pressure upon farmers embarrassed by debt.⁴ The purchase price of farms granted to Empire settlers was reduced by two-thirds, and interest charges abolished. Interest charges on Crown lands held under various agreements, and upon debts for fencing, wells, and similar purposes, were reduced or in some cases abolished. A moratorium was granted upon debts to the government for lands purchased or leased. Quitrents and certain administrative

¹ See Chap. X, p. 549.

² No. 21 of 1933.

³ No. 5 of 1936.

⁴ See Chap. XII, p. 820.

charges were abolished. Finally the Farmers' Debt Adjustment Act provided additional funds for the alleviation of farmers' debts.

During the years 1936-7 there has been a very considerable recovery of agricultural prices and of the volume of agricultural exports. The quantity of maize in 1936 was treble that produced in the previous year. The export of meat, which had already increased in 1935, was in 1936 approximately 50 per cent. greater both in quantity and value than in 1934. The export of tobacco, while below the 1934 figure, was very substantially higher than during the depression years. Despite the recent difficulties of the farming population, the number of Europeans actively engaged in farming has not very markedly declined, though it had ceased to grow during the period of depression.¹ Farm owners, who numbered 2,606 in 1931, were still as many as 2,523 in 1935.

It is inevitable that agricultural and mineral prices should fluctuate more widely than the costs of sheltered services. Too much emphasis must not be placed upon what may prove to have been temporary depressions in these primary industries. It is sufficient that those engaged in them should receive over a period of years a scale of rewards high enough to induce a fresh generation of producers to devote their lives and their resources to these occupations. But if competition from other countries both in agriculture and mining remains as strong as it is to-day, with the inevitable repercussions upon the divisible income of Southern Rhodesia, it is difficult to resist the conclusion that some re-division of the proceeds of production will sooner or later be the alternative to a decline in the level of European settlement and output. As in the Union, the whole system of rewards for skilled and semi-skilled European work may require to be progressively adapted to the still largely unknown productive capacity of the territory, so that they may reflect rather the richness or poverty of the country than, as they have in the past, its attractiveness relatively to other places as a place of new settlement.

By the various measures described above, the cost of implementing the policy 'that a white agricultural population must be the basis on which to build a white colony', advocated by the Committee of Enquiry of 1934, has been shared by the whole European

¹ *Annual Report of the Department of Agriculture and Lands, 1937*, pp. 4-5.

community, and to some extent also by the native community. The same results could, as in the Union, possibly have been achieved more laboriously, but in the end with less administrative complication and with less possibility of errors of judgment, by a necessarily painful process of deflation, whereby the bankruptcy of farmers and of other exporters would progressively have enforced reductions of incomes and of wage and salary scales throughout the territory. Whether the resulting set-back to the general development of the colony would have been fully counter-balanced by the ultimately effective readjustments, it is not easy to judge.

Various circumstances, including the wide margin of undistributed land and the opportunities open to small-scale mining, have prevented the emergence of a poor white problem similar to that of the Union. At the time of the 1931 census there were 1,234 European males returned as unemployed. The growth of this figure, which was some two and a half times as great as in 1926, caused at the time some concern. But it did not exceed 6.6 per cent. of the occupied male populations, and as compared with the incidence of unemployment in other countries, that of Southern Rhodesia has not been excessive. Its existence has, however, somewhat reinforced a natural tendency to reproduce the colour-bar restrictions of the Union.

While there is no actual colour-bar legislation, the Industrial Conciliation Act¹ and the strength of organized labour in transport and the more skilled occupations have been able to make difficult the rise of any large class of native skilled workers, occupied in the European economic system. It has been recognized, however, as for instance by the Railway Court of Enquiry, 1929, that 'in the circumstances of this colony the effect of pushing up wages on other than economic grounds would be to lessen the number of white men who could be employed at the higher rates and to bring those displaced, or who could not or would not be employed, because the minimum rates fixed were considered unduly high in relation to the economic value of the work to be performed, into closer competition with the native'.

While in practice there has been a slow but steady growth of a

¹ See Chap. XI, p. 691.

unified economic system, with the native filling the lower grades of labour,¹ there has been little desire to make the progress of such unification so rapid as to cause excessive dislocation and suffering to those Europeans who have acquired skill or have invested resources in trades which in a completely unified system might become the proper sphere of native producers. Rather, it may be said that it has been the aim to make the native economic system sufficiently vital and productive, and to make available sufficient lands for native occupation, so that the pressure to over-hasty unification may be reduced.

(c) *Nyasaland*

The economic development of the territories north of the Zambesi is even more recent than that of Southern Rhodesia. European penetration may be said to have begun with the arrival of the missions; the Livingstonia Mission in 1874 and the African Lakes Corporation in 1878 led the way. But the conflict with Arab slave traders and others resulted in continuous fighting for some years, and effective European occupation came slowly. By the time that the country was pacified some measure of economic progress had already been achieved. The European population, which had been no more than 57 in the whole of British Central Africa and Northern Rhodesia in 1891, had increased so that in 1896 there were 300 Europeans in Nyasaland alone. By the latter year an Indian population almost equal to the European had already grown up. The progress of the territory has been largely dependent on the development of the transport system, of which a detailed account has been given elsewhere; direct communication with the sea was finally completed in 1935.² The European population has grown slowly; in 1936 it was estimated to be no more than 1,838, of whom the great majority live in the Shire Highlands around Blantyre. Some 1,303,219 acres, or about 5 per cent. of the total area of Nyasaland, are alienated to Europeans, mostly in large holdings in the hands of companies and the like.³

¹ H. Clay, *Report on Industrial Relations in Southern Rhodesia, 1930*. C.S.R. 3, 1930, pp. 42, 43. The number of urbanized natives working at specialized crafts has shown a steady increase, but by 1936 was no more than 3,043.

² See Chap. XXIII, p. 1577.

³ See Chap. XII, p. 756.

Nyasaland differs from most of the East African territories in the great importance of her agricultural exports. This may be in part a regrettable consequence of the lack, at present at least, of any mineral development similar to that of Kenya or Tanganyika, let alone to that of Northern or Southern Rhodesia. But it is in part at least a welcome consequence of a policy which has encouraged the natives to grow whatever crops they are able to, and has provided facilities for their marketing and transport. Almost the whole of the £796,627 of exports of local produce in 1936 was derived from agricultural products. But this dependence upon agriculture has had certain undesirable repercussions. The demand for labour in the territory is more limited than in those possessing minerals capable of profitable exploitation, and the proportion of natives seeking work abroad, which has always been higher than in other British territories, has created a problem of grave concern to the administration.¹

As in other territories the difficulties of European settlers have required the assistance of the government during the years of depression. Growers of tea have benefited by the international tea restriction scheme.² Those of tobacco have been helped by the creation in 1936 of a marketing scheme with a pool for the disposal of surplus leaf, and by advances to enable them to plant their current crops despite the embarrassment caused by the lock-up of their working capital in heavy unsold stocks. Despite these recent difficulties the economic development of the protectorate would appear to be on stable if on narrow lines; its great need is the expansion of its cultivation, more especially in the northern areas, which are still largely undeveloped.³

(d) *Northern Rhodesia*

The economic history of Northern Rhodesia began somewhat later than that of Nyasaland, and when the two administrative areas, into which the territory was originally divided, were amalgamated in 1911, economic development had not proceeded far. Before the great period of expansion that began with the exploita-

¹ See Chap. XI, pp. 701 and 707.

² See Chap. XIII, p. 924.

³ Governor's speech, *Summary of the Proceedings of the Legislative Council of Nyasaland*, 1935, para. 39.

tion of the copperbelt¹ in 1929, the European settlement of the territory had been meagre. The British South Africa Company made a beginning of settlement when the railway reached Broken Hill in 1906, but at the end of 1930 there were no more than 260 farms occupied. The area of settlement has been mainly within a strip of some thirty miles on each side of the railway. There are two outlying settlement areas at Abercorn and Fort Jameson, and individual holdings in more remote places. The census of 1931 gave 544 male Europeans as engaged in agriculture.

The markets for agricultural produce, apart from the tobacco grown chiefly in the Fort Jameson area and the small amount of coffee near Abercorn, are almost exclusively local. There was at one time a substantial trade in cattle with the Katanga mining area, but local sources of supply have now been developed and that source of demand has almost disappeared. The costs of transport and the abundant competing supplies in Southern Rhodesia make any southward outlet to cattle markets entirely unremunerative. Maize is grown in excess of local needs in a good year, and an attempt has been made since 1936 to make its cultivation more profitable to farmers by means of a control board operating upon a system somewhat similar to that of Southern Rhodesia. Of a production of about 440,000 bags in 1936, including about 160,000 produced by natives, local consumption absorbed about 210,000 bags. Of the remainder approximately 131,000 were exported overseas, 58,000 under an agreement with the Southern Rhodesian Maize Control Board were exported to that colony, and 45,000 were sent to the Union. In a year of big crops and a rising world demand for maize its operations were very satisfactory to both European and native producers. It remains to be seen whether in a more normal year it can make substantial additions to the income of the farming community. Wheat is grown only with the assistance of irrigation in the neighbourhood of Lusaka. Until lately almost half the amount necessary for consumption has been imported, but since 1934 there has been a considerable increase of the acreage planted, and only a low yield in 1936, due to rust, prevented a close approach to self-sufficiency.

Though the growth of demand has done something to mitigate

¹ See Chap. XXII, p. 1495.

the earlier difficulties of settlers, more particularly along the railway strip, and though the acreage under cultivation has increased by about 20 per cent. during the years since the recent mining development began, it would appear that any extension of settlement must depend mainly upon the comparatively slow growth of local markets, and may be increasingly affected by the competition of native producers in the supply of foodstuffs suitable for native consumption.

The only other product of European enterprise, apart from minerals, which has been exported on any considerable scale, is the timber cut for railway sleepers and other purposes on the banks of the Zambesi, of which the exports in recent years have been normally of the value of about £60,000, but which amounted in 1936 to nearly £143,000. An increasing shortage of timber supplies is, however, likely to lead to a considerable reduction of output within the next decade.

Since the development of the copperbelt the prosperity of Northern Rhodesia has become largely dependent upon that metal. The total recorded exports of local produce in 1936 amounted to £5,936,692. Of this, £4,994,712 was the value of the copper exported, and a further £635,210 represented the value of the cobalt, zinc, vanadium, and gold, so that in all the export of metals amounted to 94·8 per cent. of the whole. The values recorded for customs purposes are, it is true, the market values overseas, and in consequence somewhat overstate the value of the export to the territory, but the broad conclusion remains unaffected. The mines gave direct employment in 1936 to an average of 1,847 Europeans and 16,333 natives. The number is now far lower than at the peak of construction in 1930, when nearly 32,000 natives found employment, but is well above the low level of 1932 when native employment was a little over 8,000. The export of copper, which began in 1930, has steadily risen, and reached in 1936 a figure of 141,000 tons.

Despite the low proportion of Europeans to natives in the territory as a whole—it was 1 to 94 in 1931, and has probably fallen back to approximately 1 to 140 since the completion of the construction period in the copper mines—the proportion of natives working in European employment is greater than in Southern Rhodesia. It

was estimated in 1935 that 66,702 natives were employed within the territory, and 49,030 outside it. The total of 115,732, excluding those occupied in tax-relief labour, would be approximately 40 per cent. of the taxable male population of 288,000.

(e) *Tanganyika*

In Tanganyika economic development was far more delayed than in the surrounding territories. The German settlement first began in the years following the foundation of the *Deutsche Ostafrikanische Gesellschaft* in 1885, but the country could not be said to have been pacified until after the suppression of the Maji Maji rising in 1906. The Tanga railway did not reach the fertile foothills of Kilimanjaro till 1911, but by 1913 there were nearly 900 European planters, mostly along the railway line from Tanga to Moshi.

The German estates were sold by auction during the period 1920-4, and passed into a variety of hands, mainly British, but also Indian, Greek, Syrian, and other. The embargo on the holding of land by Germans was removed in 1925, and large numbers of the original estate owners have now returned. In 1929 there were in all 1,985 holdings of which 508 were British, 347 German, 337 Indian, and 240 Greek. Of a European population estimated at 8,455 in 1935, as many as 2,665 were German, and during that year a further 197 immigrated.

It must be realized that there are certain physical obstacles to the rapid development of the territory. A considerable part of it is subject to tsetse fly¹ and large areas are uninhabited on account of the lack of water.² The area alienated to Europeans amounts to 2,700,000 acres or $1\frac{1}{4}$ per cent. of the whole. As regards its exports Tanganyika falls midway between the highly mineralized territories such as Northern Rhodesia, and Nyasaland with its almost exclusive dependence on agriculture. Of a total export in 1936 of £4,516,284 of local produce, £489,796 represented the export of gold bullion. The Lupa gold-field has attracted a large digger population estimated at 900 Europeans and about 17,000 natives.³ Other deposits near the shores of Lake

¹ See Chap. XVII, p. 1090.

² See Chap. XV, p. 1044.

³ See Chap. XXII, p. 1497.

Victoria and elsewhere have made some contribution to the total. Of the agricultural exports by far the most important is that of sisal, which reached a value of £1,873,312 in 1936. Exports of cotton, groundnuts, and hides are also substantial, amounting to nearly £1,500,000 in the same year. Many of the estates and of the individual settlers are reported to have experienced considerable financial difficulties in recent years, in particular owing to the collapse in the price of sisal during the depression, when it fell from an average for the previous eight years of over £40 to as low as £12 10s. in 1931, recovering gradually to about £28 in 1936. The volume of sisal exported has, however, grown from under 46,000 tons in 1929 to over 82,000 tons in 1935.

Tea and sisal are both estate crops rather than profitable opportunities for individual settlers without considerable resources; one of the difficulties of the territory has lain in the wide variation in the price of sisal in recent years. Those who have attempted mixed farming, more particularly in the south-western plateau around Iringa, where they are from 200 to 400 miles from the railway, would appear to have found it difficult to do more than make ends meet upon a very modest scale of living. Of the German settlers many are said to be heavily mortgaged and indebted to the Usagara Trading Company, financed by the *Übersee Gesellschaft* of Berlin. European wages for farm managers and assistants are very meagre, and, unless improvements of transport make possible the introduction of new export crops, the prospects of any considerable development of European farming must be regarded as remote.

(f) *Kenya and Uganda*

The development of Kenya and Uganda followed very shortly after that of Nyasaland. As is shown in the account of European land settlement in Kenya given in a previous chapter, its origin is closely connected with the construction of the Kenya-Uganda railway.¹ By 1903 there were about 100 settlers in the vicinity of Nairobi, but economic progress was slow and relative prosperity only began in 1909. The European population numbered approximately 18,269 in 1936, and 1,807 European farmers occupied 4,580,000 acres. Some details regarding the present position of

¹ See Chap. XII, p. 820, and Chap. XXIII, p. 1582.

European farming have been given in the chapter above referred to, with a reference to the steps which the administration has been forced to take in order to assist the farming community. It is difficult to distinguish the temporary effects of depression from other causes, such as the inflated prices paid for land, the fact that a large number of settlers have no experience of farming and some of them are not well adapted for colonial life, or that there have been periodic attacks of locusts and other crop pests; whether the cause be permanent or temporary, assistance has been given by a series of measures similar in their main characteristics to those employed in the Union and Southern Rhodesia. Apart from assistance by credit facilities and the like, to which reference has already been made, duties of from 10 per cent. to 64 per cent. above the normal rate have been imposed on articles such as wheat and wheat flour, butter, and sugar, which compete with local products; the railway rates have been differentiated, export rates being, for example, one-third of the rates on imported flour, and wheat further helped through the Sale of Wheat Ordinance of 1930. Butter has been the subject of a levy and export bounty, and maize has received a subsidy. It is obvious that Kenya is peculiarly vulnerable in respect of the effect of world prices on its limited number of exportable agricultural products, since there has been a relatively higher expenditure of both public and private capital on its development than in any other African colony,¹ thus creating an obligation which is doubly onerous in times of depression.

Mining until recently showed little advance, and is even to-day of small importance in Kenya as compared, for example, even with Tanganyika, though the production of gold has increased considerably.² But even in 1936 the export of gold was only equal to about 7 per cent. of current exports of local produce. Of this, coffee is by far the most important, accounting for some 25 per cent.; sisal comes next with 18 per cent. Tea, and until recent years maize and sodium carbonate, have all exceeded the gold in value. Thus, like Nyasaland, Kenya has remained predominantly an agricultural country, without many of the opportunities of

¹ See Chap. XIX, p. 1350, and Chap. XXIII, p. 1583.

² See Chap. XXII, p. 1498.

supporting the high standard of living of the European population out of the profits of mining that are enjoyed by the Union and to a less degree by the Rhodesias and by the Belgian Congo.

In Uganda there has been no parallel history of settlement. The European population was estimated in 1936 at 2,000, which was approximately its level in 1931. But of this population only an insignificant minority would regard the territory as their permanent home. In 1931 some 76 per cent. of the European community were either officials or missionaries or their families. Of the remainder, 282, including 57 occupied in clerical tasks, were engaged in industry and commerce, and only 103 in agriculture. The recent increase of numbers concerned in mining or prospecting is probably drawn from this class rather than from new immigrants.¹ The economy of the protectorate now centres largely on cotton,² almost entirely a native crop; it forms 80 per cent. of the total export. Minerals, in the form of tin and gold, form only about 3 per cent.

(g) *Southern and Eastern Africa as a Group*

It may be said that the group of East and South African territories, comprising the Union and South-West Africa, the High Commission Territories, Southern and Northern Rhodesia, Nyasaland, Tanganyika Territory, Kenya, and Portuguese East Africa, form one economic unit. The territorial boundaries by no means represent effective limits to the movements of labour. The transport systems, by rail, by road, and by air, are closely interlocked, and though certain restrictions on trade exist, in many cases ostensibly for the prevention of the spread of animal diseases, over large parts of the area, customs agreements or the Congo Basin Treaties prevent the growth of any considerable obstacles to inter-territorial trade. Until a few years ago the Belgian Congo would certainly have required to be included in this area of common development, but in more recent years a policy aiming at the 'stabilization' of labour³ has diminished considerably its dependence upon labour from Northern Rhodesia and Nyasaland, and the development of local sources of supply of foodstuffs has made

¹ H. B. Thomas and R. Scott, *Uganda*, 1935, pp. 359-60.

² See Chap. XIII, p. 904.

³ See Chap. XI, p. 681.

it almost independent of its neighbours. On the other hand, until the recent reversal of the policy of not recruiting for the Transvaal from north of the 22nd parallel of latitude, the southern part of the continent was at least partially isolated from the northern. Even now the money wages payable in the more northerly territories are substantially lower than those in the Union, but the volume of native migration is insufficient to bring them into closer equality.

Within this group of territories there were living in 1936 approximately 2,145,000 Europeans, 327,000 Asiatics, mainly Indians, and about 28,000,000 natives. It is not easy to say what proportion of this native population are adult males capable of work. The number is probably of the order of 6,500,000. Of these, there were in European employment of all kinds—government, railways, mines, agriculture, industry, commerce, and domestic service—about 2,230,000 in 1936: that is about 34 per cent. of the total. These figures are largely estimates subject to a considerable margin of possible error, but there can be little doubt that, even if in detail they cannot be trusted, the broad picture that they convey is sufficiently trustworthy for our purpose.

But they need some modification before they can serve as an index of the progress of a unified economic system. They exclude the very large numbers of natives who, through cultivation of such crops as cotton, tobacco, groundnuts, grain or cattle for sale, have in part at least attached themselves to the European economy, and the quite substantial numbers of natives whom they may employ, either permanently or, as in the case of cotton, seasonally. Thus the 1931 census of Nyasaland points out that some 32,000 were then growing cotton for sale, and some 48,000 were registered tobacco growers, many of these employing assistants. There were a further 10,000 occupied in the fishing trade, and smaller numbers as market-gardeners, milkmen, butchers, cobblers, smiths, carpenters, tailors, and laundrymen. In Uganda there are large numbers of natives dependent in part at least upon the growing of cotton and coffee for export markets. It is not easy to estimate the number of such growers with accuracy, but from evidence of total acreage planted and of size of holdings the total number must be in the neighbourhood of 750,000. In Tanganyika Territory there are also large numbers near Lake Victoria growing cotton

and employing other natives in large numbers in the cotton-picking season.

The material does not exist from which any satisfactory calculation of the total of persons working in the newer economic system could be made for the whole of this area. Nor is it possible to define with any precision those who do and do not take part in it. It is a consideration of especial importance that in Africa the woman is usually at least as important a producer as the man, and unless one knows whether the women-folk are continuing to cultivate gardens in the reserves while their men are away at work, or on the other hand have accompanied them to work, one can form no trustworthy picture of the effective extent of the native absorption into European economy.¹

Clearly during the last fifteen years it has progressed very considerably, and equally clearly, with the steady increase in Central Africa of the scope of native cash-crops, the effective labour supply, on which further European settlement or further mining development must depend, will prove the important limiting factor. There are already appearing signs of scarcity of labour, as for instance in the cotton-growing areas in Tanganyika, where labour for the ginneries was for a time almost unobtainable. It would seem likely that increasing demands and the increasing opportunities for making an income by cultivation must progressively result in higher wage scales. It is, however, clear that a subsistence economy still predominates over the greater part of Africa, and the modification of this to make more easily possible the payment of tax and the purchase of imports is still the greatest single problem of most of these East African territories.

It will be seen from this review of the recent history of the territories of South and East Africa that, with the exception of Uganda and Tanganyika, and to some extent Nyasaland, governments have been led by force of circumstances during the last few years to give growing support to European agriculture. It would be easy to deduce from this the inference that agricultural settlement is an unnatural growth that can survive only with artificial aids. Any such simple conclusion would almost certainly be misleading. It must be remembered that South and East

¹ See Chap. XIII, p. 978.

Africa have shared, perhaps in greater measure because distance from centres of consumption has particularly affected them, in an agricultural depression that has been world-wide, and in a progressive narrowing of markets due to the increasing demands for national self-sufficiency in many of the importing countries. Almost every country whose economy is built upon agricultural exports has been driven during that depression either to attempt to maintain profits by currency depreciation, as in Australia, the United States, the Argentine, and Brazil, or to create differential prices at home and in the export markets by some such devices as have been the main resort of African territories. Moreover crop-yields, more particularly in Kenya, do not compare unfavourably with those of other similar exporting areas. But the accumulating weight of evidence would seem to inspire doubts as to whether European agriculture will do more, even in good times, than make possible a very modest living as a return for hard work and the incurring of grave risks of loss of invested capital, and whether in bad times it must not prove a recurrent charge upon the revenues of the governments. Even in more normal times the support given to farming constitutes a burden directly or indirectly upon the incomes of those concerned in mining or other enterprises.

The more fundamental question is whether the most valuable contribution that European capital, enterprise, and knowledge can make to African development lies in the maintenance of a European farming community. Native agriculture, though many of its practices are based upon a valuable empirical wisdom, has undoubtedly much to learn; that is especially true of African methods of animal husbandry. But under the guidance of Agricultural Officers, backed by both long-range and local research, it is learning fast, and in many parts of Africa the price levels which in recent years have necessitated help to European agriculture, have proved sufficient to stimulate increases of native production. There are other fields, in particular those of marketing, transporting, and financing the movement of native produce, in which European assistance is both more necessary, and can on that account secure a greater premium. In some areas at all events it must, as the Committee on the Economic Position of the Agricultural Industry in Southern Rhodesia recognized, become an increasingly difficult

problem to judge how far the ideals of a particular colony are necessarily bound up with the existence of European farming, and how much other sections of the community should be prepared to contribute to its maintenance.

(h) *West Africa and the Congo*

While European settlement has been the basis of the economic development of those territories which have thus far been considered, the development of the territories of both British and French West Africa, of French Equatorial Africa, and in the main that of the Belgian Congo and Angola has taken other forms.¹ In the British territories, European capital has, apart from mining enterprises, been mainly engaged in the provision of transport and marketing facilities.

On the Niger Coast, Portuguese, British, and other European merchants established trading stations as early as the seventeenth century. But they were little concerned with political adventures, and interested almost exclusively in the trade in slaves. It was only after the progressive abolition of this trade in the early years of the nineteenth century that there was any substantial advance in the commerce in other commodities, but during the following decades a substantial export of palm oil was gradually built up.

It was not until 1861 that Lagos was occupied, mainly to prevent its continued use as a slave market. Until 1886 it was administered first by the Governor of Sierra Leone, later as part of the Gold Coast Colony. Before the period of the scramble for Africa the British merchants were unorganized, and usually engaged in keen mutual competition. In the face of opposition from newly established French companies with numerous trading stations, the British merchants came together in 1879 under the leadership of Sir George Goldie, in the United African Company, enlarged three years later into the National African Company. By 1884 the French competitors had been bought out, and the British predominance secured the recognition at Berlin of the British influence, and the establishment in the following year of a protec-

¹ The European population of Nigeria is 5,246; Gold Coast 2,800; Sierra Leone 718; Belgian Congo 18,680; French West Africa 19,061; French Equatorial Africa 4,463. Angola alone has any considerable population classed as European (30,000) but this includes persons of mixed blood.

torate; in 1886 a charter was granted to the Company, which now took the name of the Royal Niger Company. Until 1900, when political control was transferred to the Crown, the Chartered Company was responsible both for the civil administration and for the development of trade. The Company, with limited resources, was, despite its best endeavours, never able to extend its administration over the territory as a whole; a short railway was constructed from Lagos into the interior;¹ but it is true to say that its influence was chiefly felt along the main trade routes on the rivers. Even after the transfer of government, much remained to be done in the pacification of the country, and it was not until after 1906 that the phase of internal economic development could begin. The fact remains that for a capital outlay of about £1,000,000 the largest British colony in Africa was added to the Crown.

Railway development has greatly increased the trade of Northern Nigeria, which, compared with that of the southern oil rivers, was in earlier years negligible. The main agricultural export of the north is groundnuts. Cotton is grown mainly for consumption by the local industry, spinning and weaving by hand, but in recent years there has been an increased export. From the south the important exports are mainly palm oil, palm kernels, and cocoa, while cotton is also grown. Of a total value of all exports amounting in 1935 to £12,049,643, that of groundnuts amounted to £2,092,590, of cotton to £879,925, of palm oil to £1,656,159, of palm kernels to £2,245,004, and of cocoa to £1,583,827.

Nigeria has not proved to be highly mineralized; its chief mineral exports are tin, in the mining of which some 30,000 natives are employed, and some alluvial gold. Tin and gold together form on the average about 16 per cent. of the total exports. Apart from the tin and gold mines,² and one or two small estates of oil palms in the south, European enterprise is confined to trade and commerce. The Moslem population of Northern Nigeria was already accustomed, before trade was opened from the south coast, to receive certain European imports brought to it by caravan across the Sahara. The great markets of Kano, Sokoto, and other towns were already important centres of distribution of local

¹ See Chap. XXIII, p. 1584.

² See Chap. XXII, pp. 1500 ff.

manufactures. The trade from the coast under the Royal Niger Company's administration had, despite provisions in the Charter, become in effect almost a monopoly of the Company, and it was the complaints of rival British and foreign traders which, added to friction with the French on the northern frontier, stimulated the government to take over political control. After the transfer, the Company reverted to the position of an ordinary trading concern, but it has retained, directly and indirectly, much of its earlier importance, and its more recent association with the Lever interests tends to make the trade in the territory in some measure dependent upon one of the chief consumers of the country's most important exports.

The history of European contacts with the Gold Coast is longer than that with any other African territory south of the Sahara. Economic development began long before pacification was completed by the final relief of Kumasi in 1900.¹ The gold mines had been famous since the fifteenth century; modern equipment and European methods were introduced in the seventies. But transport facilities did not exist, and transport costs absorbed all profit. A brief boom was followed by a period of stagnation until the completion of the railway line to Tarkwa in 1901 and Kumasi in 1903.²

The most valuable export of the Gold Coast for many years past has been cocoa. By 1935 its value was £5,204,000, more than twice that of the gold production. In 1900 the export was still not more than 536 tons. In 1914 this had risen to about 53,000 tons, and by 1935 to 269,000 tons, about half of the world's output. While this trade depends greatly upon transport facilities, and requires the help of a European marketing organization, the cultivation and the earlier stages of marketing remain almost exclusively in native hands. Of other agricultural exports the largest are those of palm oil and of timber. Neither of these is, however, comparable in importance with that of cocoa.

Sierra Leone developed slowly during the first half of the nineteenth century into a self-supporting and even moderately prosperous colony. Its area was extended considerably during the sixties. As late as the eighties, however, there was serious conflict with the

¹ See Chap. IX, p. 466.

² See Chap. XXIII, p. 1586.

native tribes, mainly in relation to slave trading, which culminated in 1898 in a rising of the Mende and the massacre of missionaries and native officials. After the suppression of this rising, peace was more consistently maintained, and economic development became more rapid. The building of the railway was begun in 1896, and completed to the Liberian frontier by 1905. It did much to stimulate trade, but this, if only because the population is far smaller, has not reached the scale of that of Nigeria or the Gold Coast. Of agricultural exports, that of palm kernels is the largest, and has fluctuated in recent years around £500,000, though ten years earlier it exceeded £1,000,000. Exports of palm oil, kola, ginger, and pissava add about £150,000 in a normal year. Mineral production is of considerably greater importance, and was valued at £1,249,695 in 1936.¹

While mining undertakings have here, as elsewhere, been a matter of European enterprise, the growing of export crops has been almost entirely in native hands. After prolonged discussions an ordinance² allowing concessions of land to Europeans for the erection of oil mills was passed, but little advantage has been taken of it.

These three British West African territories, and the small colony and protectorate of the Gambia, contained in 1931 a population of about 25,000,000, of whom less than 10,000 were Europeans. Of this total only about 175,000 were directly employed by European individuals or concerns, including about 88,000 engaged in mining and some 23,000 employed on the railways. But this relatively small total by no means indicates the extent of the absorption of the native population into the European economy, as large numbers are engaged in the cultivation of cash crops or even in working for others so engaged. The total exports of these territories amounted in 1935 to a little less than £1 per head of population, and of this about 26·4 per cent. was the value of minerals. If comparison is made with the East African group of territories other than Northern Rhodesia, the export per head is slightly higher and the dependence upon minerals markedly higher in West Africa. The remaining East Coast territories

¹ See Chap. XXII, p. 1503.

² Palm Oil Ordinance, 7 of 1913. See also Chap. XII, p. 781.

derived in 1935 no more than some 7·2 per cent. of their exports from minerals.

Of all the West African territories, the Gold Coast, with an export in 1935 of over £3 per head, can, despite the absence of any sufficient statistics of internal trade, be regarded as comparatively the richest. An attempt has been made by Mr. Cardinall, the Chief Census Officer, to estimate its national income in 1931. His calculations would seem to have involved a by no means inconsiderable element of double counting, but if due allowance be made for that, it would nevertheless appear that the annual income may have been in the neighbourhood of £13 per head. That figure, if it can be substantiated, would indicate that the average income is probably higher than that of India, and not considerably inferior to that of some of the eastern European countries.

French West Africa never shared in the policy of large-scale concessions which distinguished the early history of Equatorial Africa and the Belgian Congo.¹ The prevailing feature of the country is the relatively low density of the population; the policy of the administration has mainly been directed to improving the means of communication, for which it has borrowed large sums of money,² in order to overcome the obstacle presented by the scattered character of the population. Its chief export is groundnuts, a purely native-grown product; the marketing is being increasingly undertaken by the *sociétés de prévoyance*. Of recent years greater attention has, however, been paid to the production of coffee, bananas, and palm oil from the Ivory Coast, for the development of which a number of concessions of land, though none of them of the nature of large estates, are now being given to Europeans. In Equatorial Africa the régime of large concessions practically came to an end when the forest rubber ceased to command a market. The density of population is lower than that of French West Africa, and, save for the facility offered by the connexion of Ubangi-Shari with the Congo, Equatorial Africa is ill provided with communications. The territory has larger reserves of marketable timber than any of the French colonies. Of late years the admini-

¹ See Chap. XII, pp. 782 ff. See also S. H. Roberts, *History of French Colonial Policy*, 1929, vol. i, pp. 348 ff.

² See S. H. Frankel, *op. cit.*, chap. v, p. 335

stration has pursued an active policy of stimulating native production, notably that of cotton and coffee, and, as in French West Africa, a number of small concessions are being made to Europeans in the coastal area; but in 1935 timber still formed 60 per cent. of the total exports, which were in value about equal to those of South-West Africa.

In the Belgian Congo also the period of exploitation by holders of large-scale concessions came to an end with the decline in the demand for forest rubber, though a certain number of these concessions still remain, and in addition the administration in 1911 gave to the *Société des Huileries du Congo Belge* a large concession for the development of the palm-oil industry.¹ The non-official Europeans resident in the country, numbering about 7,000 in 1934, are mainly engaged in the management of the concessions, in mining and the like. There is in Belgium a certain amount of feeling in favour of attempting a policy of European colonization, particularly in the Kivu area,² but the *Commission des Colonies* has consistently reported to the senate against any scheme of this nature,³ and the opinion of local authorities in the Congo seems also to be strongly against it. One of the distinguishing features of the Congo economy is the manner in which the very large sums expended on the development of communications and mining have been financed.⁴ The majority of the companies operating in the Congo are controlled by four financial groups, of which the largest is the *Société Générale*; the capital of the companies it controls is 4,800 million francs, and the significance of its connexion with the Congo lies in the fact that the Belgian Government has a share in its finances. The investments in the Congo form, in fact, an important feature in the government *portefeuille*. It is also of significance that the most profitable of its investments are in mining. It would indeed appear that, with the exception of the mining investments, much of the outlay of Belgian capital in the Congo has yielded disappointing results; the railways, as shown elsewhere,⁵ have been largely dependent on their government

¹ See Chap. XII, p. 793, and Chap. XIII, pp. 919-20.

² See Chap. XII, p. 793.

³ See *Rapport de la Commission des Colonies, pour l'exercice du budget ordinaire, 1936*, No. 87.

⁴ See Chap. XXII, pp. 1507-8, and Chap. XXIII, p. 1593.

⁵ See Chap. XXIII, p. 1593.

guarantees; and inexperience of colonial conditions has led to much waste of money in other directions. The situation has been saved by the success of the mining industry; minerals now form about 60 per cent. of the exports. The administration is now endeavouring to stimulate peasant production, especially of cotton and coffee, and this seems indeed to furnish the most promising line of development for the Congo. The disadvantages of distance and of physical conditions are such that only crops produced at the minimum cost can compete in the world's markets. It is estimated that there are about 253,000 natives working in different ways for Europeans, or about 2·7 per cent. of the population.

The introduction of a régime of concessions, or of the 'plantation' economy, in British territories, and more particularly in the West African territories, has from time to time been strenuously advocated. The grounds for this advocacy have been two. In the first place it is pointed out that in few cases do these territories possess any natural and permanent monopoly of their products, and there is a real danger that if the quality of the product grown is not as steadily improved as scientific knowledge permits, the export trade will be progressively lost to foreign competitors. On this point it has been argued on the other side that in the case of products whose quality is not vitally affected by the immediate treatment after collection, the absence of overhead costs and the opportunities in time of depression to fall back upon subsistence agriculture, may well make it possible for native growers to produce more cheaply, if less scientifically, than the estates. The balance of advantage may often turn upon the ease or difficulty with which native growers can be taught by an Agricultural Department the latest knowledge and technique as regards the choice of plants or trees, the method of cultivation, and the prevention of disease.

The second ground on which the system has been advocated is concerned with the operation of factories and mills for processing the output. In some cases, such as that of palm oil, the method of extraction can make a very great difference both to the percentage of recovery and to the value of the product. It is said that by machinery a recovery of some 85 per cent. of the pericarp oil is possible, as compared with some 50 per cent. by native methods. Moreover, since the development of free fatty acid can be almost

completely prevented, and it may be used therefore for edible purposes, the oil from the factories will ordinarily command a premium over the native product. But a factory, to work efficiently, must have a regular and assured intake of fresh produce to be processed. It has not proved practicable, it is said, to depend upon the uncertain deliveries of native growers or collectors of wild produce. On the other hand to make contracts with natives for delivery, and to enforce them where necessary by fines or imprisonment, has before now degenerated into a scarcely concealed form of slavery. The solution, it is argued, is to permit the establishment of estates which can provide a sufficient minimum basic output to the factory, while relying upon natives for the remainder.

This solution depends, however, upon the assumption that natives, unwilling to work regularly while their own masters, will voluntarily agree to accept estate labour for wages. Mr. Ormsby-Gore, in his report on his visit in 1926 to West Africa, when referring to the proposed concession of land to the Lever interests, suggested that it would not be possible to secure regular delivery of produce to an oil factory without some element of compulsion.¹

'There can be no doubt that the system which obtains in the Congo does involve not only monopoly rights, but also elements of compulsion; and the trouble with compulsion in any form is that it is only successful in the long run if it is carried out consistently and completely. It is no use imagining that you can continue a voluntary system with a small element of compulsion. Any such scheme breaks down at the point where you are not prepared to go further with compulsion.'

That a considerable measure of compulsion was necessary in the earlier days to provide a sufficient labour force for the concessions in the Congo is beyond question.² The régime of direct compulsion is, however, now ended; if there is any pressure applied, it takes the form of allowing the concessionaire a monopoly of purchase of all fruits collected within a defined area, at prices fixed from time to time by the state. The extent to which a system of this nature may be objectionable will depend on the manner in which the state interprets its obligation to safeguard the native.

In dealing with the problems arising in regard to agriculture,³

¹ *Report by the Hon. W. G. A. Ormsby-Gore, on his visit to West Africa during the year 1926*, Cmd. 2744, p. 108. ² See Chap. XI, p. 647. ³ See Chap. XIII, p. 980.

some observations have been made on the extent to which the necessity for exercising a choice between a peasant and a 'plantation' system can now be said to form a practical issue. If it exists, it can, as was pointed out, apply only within a limited field. It may be noted that, where the difficulty lies in providing natives with the necessary plant for processing, a partial solution has been found in the use of co-operative methods which enable producers themselves to own and control the processing plants. But if the latter are to work efficiently, even if owned by a co-operative society they must rely upon a regular intake of raw produce, and in many parts of the world co-operative societies have found it necessary to make binding contracts with their members for exclusive trading. If such contracts are less onerous when made with a co-operative society, or if membership of such a society can make regular work and the loss of a casual freedom of existence less irksome, a way out may thus be discovered. But the fundamental fact remains that, as the monopoly of certain tropical products disappears, African natives must learn by painful experience how severely a competitive system punishes those who will not adopt the most efficient technique of production.

More recently another line of action has been followed. It has been sought to develop what has been termed a tripartite collaboration between the state, private enterprise, and the native. This solution is well illustrated by the scheme for the development of the Gezira area in the Sudan, which has been described in detail elsewhere.¹ A lease of the land which was to be irrigated was taken by the state, and the control of cultivation and the provision of various services, including tractor ploughing and ridging, was entrusted to the Sudan Plantations Syndicate. The subordinate tasks of cultivation and picking are left to tenants, in whose selection preference is given to the original right-holders in the land. They receive a fixed share of the proceeds of the sale of the crop produced, and also have land for subsistence cultivation. A somewhat similar plan for the co-operation of the state and the cultivator upon a share-farming basis is to be found in the schemes for the development of the Niger valley in French West Africa. Here, however, there is no separate syndicate carrying some part

¹ See Chap. XV, pp. 1053-5.

of the risks and responsibilities, and the government performs all the services of which the cultivators are not capable, selling the crop, and paying a share in it to the grower.¹

It will be clear that the element of voluntary collaboration is not very easily recognizable in either of these forms of association. They have, it is true, the merit of affording an effective means of securing the technical improvement of native methods of agriculture and marketing. But both examples owe their origin to unusual circumstances; in neither case could the administration have developed the settlement of the area brought under irrigation, or ensured a return on the heavy outlay incurred, unless it had secured an effective control both over the distribution of the land and the methods of cultivation. If similar systems come under consideration elsewhere, it is well to realize that their success involves either a strong measure of control (for the maintenance of which the only effective sanction is the dispossession of the cultivator) or voluntary co-operation to an extent which is only likely to be attained where a population is surplus to the land available, or the profits of cultivation so attractive as to outweigh other considerations. It must also be realized that there are always certain potential difficulties attending government enterprises of this nature. If the capital required is raised by loan, subject to fixed interest charges, there may be a further extension of that inflexibility of government expenditure, which in the case of railways has already proved a considerable handicap to other developments. It is one of the chief virtues of a system of private enterprise that in times of depression, or in cases of failure, the investor receives a diminished dividend. The risks involved in African enterprises are considerable, and do not disappear by the transference of responsibility to a government. It is only if the financial stability of a government is assured that it can safely involve itself in considerable undertakings of this kind.

III. THE NATIVE ECONOMY

(a) *The Union of South Africa and the High Commission Territories*

Thus far the types of economic organization considered have been fundamentally European in character, modified so far as

¹ For a discussion of various systems of this nature see H. Martin Leake, *Land Tenure and Agricultural Production in the Tropics*, 1927.

is necessary to facilitate the introduction of African workers or growers of cash crops for the European market. It remains to consider the economic developments which have been built upon a foundation not of the European but of the native organization, and the changes in the latter which have been brought about through changing circumstances. Many of the problems of the relation of the old economy to the new in South Africa were inevitably discussed at an earlier point, when the growth of the modern economy was under consideration. It became apparent that any native economic policy, designed to improve standards within the more primitive economic system, must start from certain assumptions regarding both the immediate and ultimate parts which natives will play in the general economy of South Africa. Differences of opinion, both among economists and among administrators, spring mainly from differences in their assumptions; and these assumptions involve questions of the political and sociological relations of the two races at least as difficult of solution as those that concern their more immediately economic relations. Any general economic policy must assume a view regarding the future independence or interdependence of the two economies. Is the native economic system a transitional survival, that requires to be kept in languishing existence until the growing modern system has completely replaced it and the two economies have become one? Or is there a permanent place in South Africa for a separate, segregated, native economy, having certain inevitable contacts with the more modern system, but contacts comparable in scale and effect with those that exist between two contiguous nations? The wisdom of innumerable major and minor decisions must depend on the replies to these questions. But they are not the kind of questions to which this generation can give one binding and irrevocable answer that will guide policy in perpetuity.

It has been inevitable, therefore, that policy should be subject to change, reflecting the general outlook of each succeeding generation, and the alternating fears of shortage of native labour, and of excessive native competition.¹ Thus in times of trade activity and

¹ See H. M. Robertson, '150 Years of Economic Contact between Black and White', *South African Journal of Economics*, vol. ii, no. 4, 1934, pp. 403-25, and vol. iii, no. 1, 1935, pp. 3-25.

universal prosperity a general scarcity of labour on the one hand, and the lessened fear of competition on the other, have permitted native advance into new fields of activity. In times of depression, and more particularly of agricultural depression, fears have inevitably increased, and restrictions have tended to multiply. Policy has reflected also, to some extent, the rival ideals of those who believe that the welfare of the Bantu is best promoted by permitting freely his absorption into a general South African system, not only of economics, but also of culture, and of those, on the other hand, who believe in the preservation of Bantu culture by restricting the violence with which European culture immediately impinges upon it.

The Native Economic Commission of 1930 expressed the view that while the primitive subsistence economy meets the requirements of a community at a certain level of development, the money economy is in entire conflict with it and must ultimately disintegrate it completely.¹ But in the case of the Union there are particular reasons why the transition must almost certainly be protracted. The closer numerical balance between the two races and the existence of a large permanent European population, in contrast to the more temporary and migratory European population of the territories of Central and West Africa, makes it necessary that European interests shall be fully considered in framing policy. The divided political control of the labour-employing and of some at least of the labour-supplying areas must, moreover, render any unified plan difficult. The peculiar circumstances of the chief industrial area on the Rand make it difficult to envisage any complete scheme for the 'stabilization' in that area of a large native labour force, with its full complement of women and children, and the exhaustible nature of the gold resources makes the wisdom of such a vast concentration in any case questionable. But the fact that the period of transition must be protracted increases the need to consider some of the problems which the native economy now presents. To take only one instance, recent attempts to prevent the growth of an urbanized native proletariat and a consequent native unemployment problem have served to increase

¹ *Report of the Native Economic Commission, 1930-32*, U.G. 22, 1932, para. 9; see also E. H. Brookes, *The Colour Problems of South Africa*, pp. 111 ff.

the pressure upon the reserves. In any case many of the problems of native economic welfare in the reserves would appear to be too urgent to permit of postponement even for a comparatively short period.¹

The economic life of the native reserves to-day is far from being an unchanging survival of the subsistence economy which existed when the Bantu first came into contact with the European.² In that economy exchange had no regular place, though on occasion a less skilful worker might barter grain for the product of a more skilful, and specialists, such as ironworkers, were paid in grain or cattle. Again, though wealth was viewed in terms of cattle, its accumulation was restricted, both on account of the obligations to which the possession of cattle gave rise, and because to attempt a private accumulation was to usurp the functions of the chief. But even before political sovereignty over the Bantu was claimed or exercised, European influences made themselves felt. At an early stage periodical fairs were held to which the Bantu brought their saleable property, such as ivory, cattle, hides or gum, and exchanged it for copper wire, axes, knives, beads or buttons.³ Before long traders began to penetrate into the native areas, trading posts were established, and the fairs died a natural death. The competition of trade goods soon began to destroy such native industries as existed. But their purchase, and the payment of taxation, inevitably required a compensatory sale. At first, ivory, hides, and gum played the most important part, but by degrees accumulated stores of these became exhausted, and other exports had to be found. Social customs and other restrictions prevented cattle-trading on a large scale,⁴ and the African thus came to depend largely on the sale of his crops and of his own labour for obtaining money for the purchase of imported goods.

The large-scale export of native crops has only developed during comparatively recent years. Nor is it everywhere possible, owing to the overcrowded state of some reserves and of some of the High Commission Territories, and the growing numbers of persons dependent in the main for food upon them. In Swaziland, for example,

¹ See Chap. XII, pp. 803 ff.

² See Chap. XIII, pp. 884 ff.

³ I. Schapera, 'Economic Changes in South African Native Life', *Africa*, vol. i, no. 2, 1928, p. 178.

⁴ See Chap. XIII, p. 882.

'the foodstuffs grown by Natives are only about one-fifth of their requirements, the remaining four-fifths being supplied by European farmers and by traders who import grain from the Union'.¹ Bechuanaland ordinarily imports mealies and kaffircorn which may be roughly estimated at from 5 to 10 per cent. of the total consumption. Basutoland, while still a very considerable net exporter of maize in years of good harvests, has imported large quantities in years of drought such as 1933. Thus an increasing emphasis has necessarily been placed upon the sale of labour as a means of purchasing imports and of securing the means of paying taxation. The growing pressure of industrial competition from low-paid native labour, from which the poorer sections of the white community have suffered, has been largely a consequence of the difficulties which the natives in their turn have encountered in expanding their own agricultural output sufficiently to feed themselves and to provide saleable exports.

Some idea of the important part played in the present economy of the native areas by the sale of labour can be obtained by roughly calculating the balance of payments in Basutoland. Other territories, or one of the Union reserves, might perhaps have yielded more interesting and typical information. For Basutoland is better placed than most, both in area per head of population,² and in the possession of a valuable export of wool. But none of them provides sufficient statistical material even for an approximate estimate. In 1933, visible imports into Basutoland amounted to about £643,000. Invisible imports, such as pensions and remittances, may be estimated to bring this to about £670,000. Visible exports were a little over £330,000. Thus invisible imports, including the value of all forms of remittances from labour working outside the territory, must have accounted for about £340,000, a little more than the total of visible exports. This figure is reasonably consistent both with what is known regarding the approximate total of wages paid to Basuto workers at the mines, and with the remittances made by them and other workers outside the territory during that year. The total of wages earned by 31,207 workers at the gold mines may be estimated at about £1,200,000. There were in addition some 30,000 others

¹ *Annual Report on Swaziland, 1933*, Colonial Report, 1694, p. 17.

² *Report on the Financial and Economic Situation of Basutoland*, Cmd. 4907, 1935, p. 33.

working in agriculture and miscellaneous labour, and a further 45,000 who had gone abroad on visiting passes. Though their wages were almost certainly much lower on an average than those of the men working at the mines, the total earnings must have been substantially in excess of £1,500,000. Remittances, repayments of advances, compensation payments, and deferred pay, chiefly from the mines, may be estimated approximately at £260,000.¹ To account for a further £80,000 as brought back by returning workers is not improbable. The total benefit to the territory would, if it amounted to £340,000, be between 20 and 25 per cent. of the wages of those working outside. This figure is in close accord with an estimate made for Northern Rhodesia,² where the benefit was calculated to be about 22 per cent. of wages.

Of the exports of Basutoland, other than human labour, approximately 68 per cent. in 1933 was accounted for by wool and mohair, 14 per cent. by wheat, and 12 per cent. by cattle exports. In years of good wool prices, such as 1928, as much as 75 per cent. came from wool and mohair, and the total value of exports varies largely in accordance with variations in their prices. These two exports fell in value from approximately £750,000 in 1928 to about £530,000 in 1929. The effect upon the numbers seeking work abroad was immediate. In 1928 there were issued 53,878 passes to natives who wished to leave the territory in search of work. In 1929 the figure rose to 74,762. The effect was most noticeable in the number seeking agricultural work and general labour, which increased by over 17,000. The continued fall in the price of wool in subsequent years, until wool and mohair exports in 1931 yielded no more than £116,000, gave an added stimulus to the search for work. It is, indeed, difficult to conceive how the present economic system of South Africa could operate, if it were not able to depend upon the unique inverse activity of gold, which makes it most urgently demanded, and its real value highest, in the depth of a depression.

The problem of the adequacy of the reserves has already been considered above.³ It is clear that the general trend of native

¹ *Report*, op. cit., Cmd. 4907, 1935, pp. 36-7.

² *Modern Industry and the African* (ed. J. M. Davis), 1933, p. 179.

³ See Chap. XII, p. 805.

life is now towards European civilization, and that the possibilities of the reserves must be judged by the opportunity which they afford to achieve that standard, and not by their ability to provide some improvement of the conditions hitherto associated with tribal life. But judged by the European standard, the ability of the existing reserves and the extensions now in contemplation to support the present native population is doubtful, even when allowance is made for the improvements in native agriculture, which are urgently needed. The consequences of the present limitations of native agricultural activity are twofold. In the first place, the native population now consumes, it is estimated, 8,000,000 bags of maize more than it produces,¹ and it is obliged to pay for this in the main by selling its labour outside the reserves, in the mines or towns, or in agriculture. Thus the proportion of natives living and supporting themselves in the reserves is diminished, and the competition of their enforced labour with the poor white section of the community is enhanced. In the second place, as a larger part of native incomes is spent upon the purchase of foodstuffs, the surplus available to buy other merchandise is reduced. Basutoland, for example, was able to buy over £1,000,000 worth of general merchandise in the prosperous years 1919-20. Purchases were over £750,000 in 1923-4 and in 1927-8. They had fallen to little over £400,000 in 1932, and after reaching about £363,000 in the famine year 1933, recovered to about the 1932 level in 1934. In Bechuanaland purchases were over £237,000 in 1929 and under £119,000 in 1933. With the precise causes of these declines we are not for the moment concerned. The figures serve to show that there is a considerable native demand for such merchandise, which at present goes largely unsatisfied. The question therefore arises whether the white community can derive more benefit by competing with native agriculture in the growing of native crops for native consumption, or by allowing the native to grow his own foodstuffs, thus setting free native purchasing power to buy manufactured goods. Judged purely from the economic standpoint it would seem that the relative advantage of the European is considerably greater in industry than in agriculture,

¹ See Chap. XII, p. 806. See also J. M. W. Grosskopf, *Weltwirtschaftliches Archiv*, Oct. 1933, p. 436.

and that the benefit to the industrial community would outweigh any loss of agricultural markets.

But even if additions to the reserves of the Union may be a necessary condition of the stabilization therein of the native community, and of any sufficient improvement of the standards of native life, it is urgently necessary that better use shall be made of the area that is already available. The more technical problems of agricultural improvement, and the many difficulties involved, have been discussed in Chapter XIII. The resources available both for agricultural improvement and for more general purposes of native development and education will be considered below. Such limited resources as will be shown to be available cannot be expected to produce substantial results in any short space of time. The Native Economic Commission rightly sounded a warning against undue haste. But the present situation in the reserves is not in general that of impulsive reforms being pressed upon a conservative majority. Rather are the reforms failing to keep pace with public demand for them, and the difficulties of stabilizing a contented population in the reserves spring largely from their inability to provide those mental and material enjoyments that the travelled native has now begun to demand. It is an almost necessary condition of the successful application of any policy of partial segregation that the reserves shall be enabled to make better and more attractive provision for their inhabitants.

Any sufficient raising of native standards of living in the South African reserves must come from one of two sources. It may come from an improvement in the technique of native agriculture making available both an increase of consumable products and an increased surplus for sale, and thus for the payment of taxation and for the purchase of imported goods. That agricultural improvements are most desirable none can question. But that such improvements can by themselves achieve the end in view is more open to doubt. Family budgets analysed for the Native Economic Commission indicated that the existing cash surplus on an average holding might be as great as £4 1s. 0d. or as little as 15s. 1d. For the Transkei, an average of £2 12s. 6d. was estimated; but it presupposed a price for mealies higher than most natives were likely to obtain in practice. It was argued by Mr. S. G. Butler, formerly

Principal of Tsolo Agricultural School, that by better farming this surplus might be increased to about £13 14s. 6d. Subsequent experiments would, however, suggest that this figure is too high,¹ and like the former figure it assumes a high price for mealies sold. It is difficult to make any comparable estimates of expenditure. Taxation in the Union will ordinarily absorb 30s. Blankets and clothing may require another £2 to £3, a 'dressed' native, or a Christian, requiring substantially more than a pagan. Beyond that, agricultural tools and implements, and such items as paraffin, matches, soap, sugar, tea and coffee, and pots and pans, absorb any residue. It is clear, however, that even if the surplus can be raised from some £2 10s. to £10 it will not easily suffice to meet the more urgent needs, and in addition permit of the payments of school and church fees, for better clothing, for improved furniture and household equipment, and the many other small improvements that natives with experience of town life are not unreasonably beginning to desire.

The second and alternative source of improved standards is a gradual increase of the division of labour and of the exchange of goods, so that instead of obtaining the means to satisfy their wants by the sale of surplus agricultural production, the natives themselves make directly some of their requirements. It has been an unfortunate consequence of African contact with Europeans that instead of being modified and improved, as were for example the early British goods by contact with the products of the Roman invaders,² native handicrafts have been with a few exceptions almost exterminated, and their place taken by imported goods paid for by labour or agriculture. The growth of industrial specialization, with its accompanying development of technique, is the road by which the western nations have gradually come to their present position of wealth. The increasing contacts during the passing centuries permitted from time to time great advances, as a technique developed abroad was transmitted, sometimes as the result of conscious policy, sometimes through wholesale migrations of skilled artisans to other countries, under the pressure of religious

¹ M. Hunter, *Reaction to Conquest*, 1936, p. 142.

² See R. G. Collingwood and J. N. L. Myres, *Roman Britain and the English Settlements*, 1936, p. 227.

or political persecution. But the closely parallel development of the European nations made such transmission relatively easy. A new foreign technique seldom, if ever, required a social structure so fundamentally different from that which already existed, that the community was unable to undergo the necessary process of adaptation.

The contacts between primitive native economies and Western capitalism are, on the other hand, essentially catastrophic. The primitive economy is incapable of adaptation to the new technique at one move. The problem is, then, whether it shall collapse completely and be replaced by a new model, complete with the social and legal framework which modern capitalism postulates, or whether it shall be supported and safeguarded temporarily while it undergoes a series of modifications, embracing within a short period the long course of Western economic development.¹ If the fusion of the two economic systems into one is the destination of African development, then to do more than delay the collapse of the primitive economy is waste of effort. But if partial segregation is to endure for a long period, as would appear likely, an attempt to modify and develop the native economy is necessary.

Within the reserves themselves there are already some signs of a gradual increase of the division of labour and of the exchange of products. Formerly, as has been described above, each family was, as regards most of its needs, self-sufficient. A few articles requiring particular skill in manufacture, such as pottery, ironwork, and basketwork, were exchanged. But the specialist seldom earned more than a small supplement to his normal income from agriculture. In recent years the situation has changed materially. In Pondoland, for example,

‘with European contact and the introduction of money has come a great increase in the circulation of goods, and consequently the necessity of accumulating goods which may be exchanged for other goods. Money has so penetrated and been absorbed into Pondo culture that it is commonly used in transactions between Pondo. In each district there is a standard cash price for such pottery, basketwork and woodwork as is made. The price may vary between district and district. A particu-

¹ It must not, of course, be supposed that a necessary process of modification involves a passage through every stage through which the Western economies have passed.

larly well-made article will command a higher price, but there is a recognized standard price . . . bccr, and meat, which formerly were always given free, are now sometimes sold.¹

These are indications rather of a beginning of native exchange than of its wide prevalence. The development of the money economy is hindered somewhat in South Africa by the comparative absence of organized markets and fairs for the exchange of native products. Trade has hitherto been largely in the hands of European traders scattered usually at intervals of some half-dozen miles. In 1932 they numbered in the Transkei alone about 650. Their main business is the purchase of native cash crops or products, and the sale of a wide variety of imported or South African factory-made goods.² They do a certain trade in the purchase and re-sale of grain to natives, but the grain is often repurchased by the same persons who had originally sold it, and such transactions are often little more than a means of securing cash to pay taxes in advance of earnings obtained by work at the mines or elsewhere. Much of their trade is done on credit, based either upon the security of cattle or upon the bond of some second person.

During 1935 a few native traders were for the first time, and experimentally, allowed licences to trade at a distance of at least two miles from the nearest European trader. They may perhaps contribute eventually to a general increase of the practice of the purchase and sale of native goods by natives for cash. The position of the European trader has in the past been fortified by the fact that he performs a variety of functions other than that of trading pure and simple. He recruited labour for the mines until the introduction of the 'assisted voluntary system'.³ He has provided in one way or another substantial amounts of agricultural credit. The growth of banks or co-operative societies, or of facilities in the way of markets for the direct disposal of products to the exporting merchants, may gradually lead to the decline of the importance of the European trading store. But for the time being at least the store holds an important place not merely in the economic but also in the social life of the reserves.

Markets for the sale of cattle are comparatively rare, not only in

¹ M. Hunter, *op. cit.*, pp. 139-40.

² E. S. Haines, 'The Transkei Trader', *South African Journal of Economics*, vol. 1, no. 2, 1933.

³ See Chap. IX, p. 652.

the Union but also in the surrounding territories. Where they have been tried, as at Nongoma in Zululand, they have been well attended, and there has been a considerable turnover, as many as 1,176 head being sold in two days. There would appear to be scope for further experiments in this direction.

(b) *The Rhodesias and East Africa*

The native economic problems of the territories other than the Union have much in common though in detail they differ greatly. In none of them is the problem of the inadequacy of land so acute as in the Union, and in none of them is the ratio of European to native so high. Thus neither the demand for native labour on the one hand, nor the pressure to work on the other, is comparable with that farther south. Agriculture remains the predominating occupation, and industrial work is a less important part of the whole. It is interesting to contrast the situation in Africa with that which exists in other countries.¹

In Africa as a whole, including those territories north of the Sahara which are not covered by this Survey, approximately 74·4 per cent. of the population was in 1930 dependent upon agriculture. In the world as a whole the proportion was approximately 64·6 per cent. In the densely populated Asiatic countries it was close to the African figure, 75·1 per cent. In North America, on the other hand, it was approximately 23·1 per cent., and in Europe 36·7 per cent. If we take Europe and North, Central, and South America, which compose a more or less self-sufficient area utilizing modern agricultural methods, we find that approximately 39 per cent. of the population was dependent upon agriculture.

The first stage of improvement must come then from agricultural development.² Once a surplus is available there are, in the territories outside the Union, two alternatives open: the first to increase the agricultural production and exchange the surplus for manufactured goods, the second to withdraw resources from agriculture and devote them directly to the manufacture of the simpler products required. As to which of these processes will be more

¹ See *World Agriculture*, An International Survey by the Royal Institute of International Affairs, p. 3. For the sources of these estimates and for warnings regarding the uncertainty of some few components of them, reference should be made to that volume.

² See Chap. XIII, p. 960.

economical no generalization is possible. If agricultural efficiency can be stimulated, while craftsmanship lags, the comparative advantage may lie in selling agricultural products. But distances in Africa are great, transport costs high, and the residue left to the original producer small. If, on the other hand, by degrees, skill in making elementary products can be developed, the automatic protection afforded by the inward transport costs will be considerable.

By whichever of these routes the advance is made, the possibility of further improvement must depend largely upon the facilities which may exist for the transport and exchange of goods. 'The material development of Africa', wrote Lord Lugard,¹ 'may be summed up in one word "transport".' The transport of goods to their ultimate consumers requires not only the technical equipment to move them, but also the human organization of merchants, middlemen, and markets to deal in them, and to take over from the individual grower or craftsman the tasks of discovering where they may be profitably sold, and of financing their movement.

Thus the development of markets and of marketing facilities is, after the improvement of agriculture and transport, the first desideratum. There is, however, no systematic study available for Africa as a whole, or even for individual territories, of the methods of native trade, of the extent of the development of the exchange economy, of the extent of inter-local native trade in foodstuffs or goods, or of the extent of the use of money in trade between native and native. More detailed inquiry into this field would be most valuable.

The main essentials of the native economy of Southern Rhodesia are similar to those of the Union. The aim of recent governments has been to depend upon the native races for all unskilled labour, but, that apart, to regard segregation as 'absolutely necessary for the comfort and happiness of both races', not only territorial segregation, but also economic segregation sufficient to prevent economic competition between individual members of the two races.² The consequences of this policy in so far as it concerns native lands have been discussed elsewhere. It was there shown that in addi-

¹ *The Dual Mandate in British Tropical Africa*, 1929, p. 5.

² See Sir C. H. Rodwell, *Address to Conference of Superintendents of Natives and Native Commissioners*, 1927.

tion to defining areas for native occupation, further land has been made available for native purchase. Thus the attempts to better native agriculture are directed partly to the improvement of the traditional system of shifting cultivation, and partly to the inculcation of new ideas that can be followed on small holdings subject to individual tenure.¹

This problem has been made urgent by the rapid growth both of human and animal population. Since 1902 the human population has, if the earlier estimates can be trusted, more than doubled, and the number of cattle has increased almost thirty times. Since 1910 there has been a growth of over 50 per cent. in human population, and a more than six times increase of cattle. Drought in recent years has severely reduced the numbers of the latter in some of the more seriously overstocked reserves, but it is becoming increasingly clear that, here as elsewhere, if the African will not consume his cattle, his cattle will consume him. The Southern Rhodesian natives are less unwilling than are many others to sell cattle when a satisfactory market is open to them. An account of the extent of native trade in grain and cattle has been given in a previous chapter.² Attempts have been made recently to increase the range of cash crops by introducing the cultivation of cotton and groundnuts. It is too early to say how successful these experiments will prove.

Apart from agricultural education,³ attempts have been made to raise the standard of living in the native areas by the teaching of crafts, and from the purely technical aspect some success has been achieved. But, as in the Union, the absorption of these craftsmen has proved a difficult problem. The European demand for their services has reached, or almost reached, saturation point. To the more important end of raising native standards they cannot at present easily contribute. The employment of specialist craftsmen can develop only at a pace dictated by the slow growth of a more widespread practice of specialization and exchange, and of the progressive establishment of an economy based upon division of labour.

In the past such development has been somewhat obstructed

¹ See Chap. XIII, pp. 960 ff.

³ *Ibid.*, p. 964.

² *Ibid.*, *passim*.

here, as also in Northern Rhodesia, by the absence of monetary units of a size suitable to the needs of native trade. The recent introduction of a cupro-nickel currency of small denominations may help to encourage it. But it is clear that the almost complete absence of native markets and fairs, and of the widespread exchange of products which they stimulate, is a grave handicap to economic development, and it is to be hoped that it will be gradually eliminated.

The native economy of Northern Rhodesia has moved less far from the subsistence stage than that of any of the areas thus far considered. The absence of communications, the limitations on movement imposed by the tsetse, the relative poverty of the territory before the development of the copper mines, the distance from the main centres of employment in the Union, all contributed to postpone change until, in the last two decades, the demand for labour, first in Katanga and later in the copperbelt, brought about a sudden economic revolution. But even to-day the subsistence economy remains the typical and predominant feature, and trading relatively inconsiderable.

In both the Rhodesias, as in the Union, the bulk of the native trade was until lately in the hands of European stores. The Indian traders, who play so large a part in the commerce of East Africa, were here comparatively few in number. In Southern Rhodesia there were in 1931 only 777 Asiatic male wage-earners, of whom 343 were engaged in commerce. Their number had grown perceptibly since 1926. In Northern Rhodesia the total Asiatic population in 1931 was no more than 56. But they are beginning to play an increasingly important part in the organization of the native trade, and many of the native hawkers and shopkeepers are now little more than agents.¹ The European trading stores of Northern Rhodesia have been in the past more concerned with the sale of imported manufactures than with the purchase of native goods for export. This has been in part at least an inevitable consequence of a lack of cash crops capable of supporting the high transport costs consequent upon distance from the railway, or from any alternative means of cheap transport. During the last few years, however,

¹ *Report on the Financial and Economic Position of Northern Rhodesia*, Colonial 145, 1938, pp. 21 and 28.

new opportunities for the profitable sale of native produce have been discovered. In the neighbourhood of the railway they have developed cash crops and market-garden produce. For the more remote areas a trade in skins and beeswax¹ has been built up.

The trade even of the European stores has in the past been largely in the form of barter.

'Most European traders have made a practice of bartering trade goods for grain, thus securing to themselves a larger profit, and natives living at a distance from the railway have found great difficulty in obtaining cash for their produce. This state of affairs is unsatisfactory both from the point of view of natives and of the Government, and consideration is being given to the introduction of legislation prohibiting the practice. In the meantime, every effort is being made to encourage cash payments.'²

In addition to the European trading stores a considerable number of natives have possessed hawkers' licences. While some of these are natives regularly engaged in trade, there are many who have returned from work in Southern Rhodesia or elsewhere, bringing home their savings in the form of trade goods of which they wish to dispose. In the past, however, the number of hawkers has been swollen as a consequence of the high cost of native shop licences. Since there is no purpose in discouraging the more easily controlled village shop, a new system of cheap village-shop licences was introduced in 1936. No licence is necessary, however, for trading in native goods, and since the growth of the copper mines there has been a great extension of purely native trade. Honey, fish, tobacco, and a variety of other foods and condiments have been transported to the mines, partly by head-porterage, but mainly upon bicycles.

Though the general stimulus of activity in Northern Rhodesia has encouraged in these ways the trade in native produce, native manufacture is undoubtedly on the decline. The smelting of iron is moribund; the ubiquitous petrol tin has made pottery an almost forgotten art; the hand-loom has nearly disappeared. It is a regrettable effect of European contacts in Africa that an increase in wealth should thus destroy rather than stimulate local craftsman-

¹ See Chap. XIII, p. 891.

² Northern Rhodesia, *Native Affairs Annual Report*, 1935, p. 15.

ship. For it makes it increasingly difficult to resist the tendency of secondary industries, catering for the native market, to grow on the European model in the big urban centres, with inevitable repercussions upon health and welfare.

Throughout the remaining East African territories the Indian trader is responsible for a very large part of the whole native trade, but more particularly that concerned in the sale of imported goods and the collection of native products for export. The local trade, on the other hand, between native and native in foodstuffs and other local produce is mainly conducted through markets, and is largely in the hands of the women, who freely exchange their surplus products without need for any licence or permit. In Kenya there are great numbers of small markets of this kind, which occur as often as once or twice a week. The women will carry their produce several hours' walk to the traditional place of market, as much to enjoy the opportunity of meeting their friends as to secure profit from exchange. In these markets the bulk of transactions are by barter, and customary values exist at which one product is exchanged for another.¹ These markets for the exchange of native produce have become centres also for other purposes and other trades. They have been used as places for the establishment of ghee dairies and hide-curing depots. They are attended also by native hawkers or traders, selling imported goods of every sort and description. This trade is mainly in the hands of men, and is conducted chiefly through the medium of money.

These native markets are in many cases attended also by Indian traders purchasing native produce for export. They buy, as a rule for cash, but sometimes by barter, produce which is brought in either by head or to a less extent by cart or lorry. The traders in the smaller centres sell either to wholesalers in bigger centres or direct to the exporter. They are seldom very expert buyers, and the market is as a rule highly competitive. They fear to reject consignments because the trade will merely go to a rival. In consequence a large quantity of inferior stuff is often bought and mixed with better produce, lowering its grade and making it hard to sell. This practice has made it particularly difficult for Agricultural

¹ For accounts of such markets, and of the products exchanged, see R. C. Thurnwald, *Black and White in East Africa*, 1936, pp. 107-8, and J. Huxley, *Africa View*, 1932, pp. 176 ff.

Departments to improve quality and price. With this latter end in view, the Government of Kenya introduced a Crop Production and Live Stock Ordinance,¹ giving power to prohibit trading in produce of inferior quality. When this did not fully meet requirements, a system of inspection centres was substituted, to which all produce must be brought before being sold in a trading centre. The Native Produce Market Ordinance² gives additional powers to control and regulate native produce. Purchase may only be under licence. Exclusive licences may be granted for periods up to seven years for products or technical methods new to an area. The Governor-in-Council may prescribe minimum prices where an exclusive licence is granted, and barter may be prohibited. Rules may be made for the regulation of markets, including the restriction of purchase to specified places and times. This Ordinance has been applied to wheat, maize, milk, and butter.

The important part the Indian community play as traders has been described in the chapter dealing with the non-European immigrant communities. Of the total Indian population of Kenya, which amounted in 1931 to 39,644, of whom 17,749 were adult males, as many as 9,868 were occupied in commerce. Of other races, there were 1,576 Europeans, 866 Goans and 3,172 Arabs engaged in commerce. In Tanganyika the petty trade is likewise almost exclusively in Indian hands. Of a total Indian population of 23,224, there were 3,860 engaged in commerce. Since 1927 these traders come under a scheme of licences.

Both in Tanganyika and in Uganda the greater part of the collection and marketing of the native-grown cotton crop is in the hands of Indian traders. All the ginneries in the neighbourhood of Mwanza in Tanganyika are controlled by Indians. The markets in the Lake Province are so regulated that fair prices may be obtained by the native growers. They are forbidden to sell cotton except at licensed markets and to licensed buyers. Some of the markets are confined to ginners; in others the buyers are middlemen. The Agricultural Department declares a weekly price, based upon a standard formula relating the local price to price in the world markets.

In Uganda the purchase of cotton in the early days, after the first

¹ No. 3 of 1926.

² No. 28 of 1935.

introduction of the crop following the opening of the railway in 1902, was largely in the hands of itinerant Indian buyers. But a system of markets was soon established, and power-driven ginneries were built. The transport of seed cotton to the ginneries was at first largely by head, involving great waste of time and labour, but by degrees roads were improved and up-country ginneries multiplied. A collapse of prices in 1921 brought the government into active participation in the carrying and marketing of the crop, and led to an investigation in 1923 into the problems of the industry. In the following year a Cotton Control Board was established. By its recommendation permanent markets were created in the Eastern Province, and in 1926 a Cotton Ordinance, since amended in various respects, provided for the control of cultivation, marketing, and ginning. The increasing number of ginneries had made competition between them intense, and unauthorized increases of ginning capacity were forbidden. An attempt, not wholly successful and since abandoned, was made to diminish competition by the establishment of area cotton-buying associations, and the prohibition of movements of seed cotton out of their areas.

This competition of ginneries led to the development by buyers of facilities for the collection by lorry of cotton from the growers. While this has been a great gain to native growers, it has had the disadvantage of making more common the mixing of qualities and the spread of disease. To prevent this, cotton-growing areas have been divided into quality zones, and a system of licensing of lorries introduced, which confines their operation to a single zone. As it was realized that this would tend to encourage the creation of buying associations within each zone, power was taken to fix minimum prices, should it be necessary. The growing importance of the crop has now led to the establishment of a local market for cotton. Brokers have opened offices in Kampala and Jinja, but export is concentrated mainly in the hands of a small number of big firms.¹

As in Kenya, powers exist in Uganda under the Native Produce Marketing Ordinance, to regulate the conditions of sale of produce which is of economic importance. If the Governor 'declares' some district in respect of some particular product, no person who does not possess a licence may buy or export that product from that

¹ See H. B. Thomas and R. Scott, *op. cit.*, pp. 131-5.

district. The Ordinance also provides for the limitation of sales to recognized markets, for the requirement that purchases shall be in cash, and for grading and price-fixing. These powers have been used to control in certain districts the marketing of coffee, tobacco, simsim, and groundnuts.¹ The markets dealing in native food-stuffs and produce are less developed than in some other parts of East Africa. Though they exist in various towns and native centres, the trade conducted in them is said to be small.² The trade in imported goods is largely in Indian hands. The latter act as intermediaries between the wholesale business houses in Nairobi, Mombasa and other centres, and the native. The native hawker or stall-holder does only a small part of the trade. The government can control, under the Trading Centres Ordinance, the sites of stores to be set up by non-natives, according to the needs of the population.

(c) *West Africa*

In West Africa the progress of the exchange economy has proceeded very much further than in East or Central Africa. The Hausas in particular possess a far greater aptitude for commerce than do most of the Bantu tribes, and from the time of the slave trade there has been a hierarchy of middlemen linking the commerce of the ports to the interior. Apart from minerals the wealth of West Africa depends mainly upon natural products, in particular palm oil and cocoa, harvested by natives without the direct intervention of any European organization; the latter is concerned chiefly with the tasks of transport and with the final processes of marketing. The need for some means of handling the crops in the earlier stages of their movement from the grower to the final exporter has brought into existence a large group of native traders, but it is a matter of frequent complaint that the goods have to pass through too many hands, and that too small a share in the final price reaches the original grower. An improvement in their efficiency, and the elimination of those who are redundant, might do much to improve standards of living of the native population. But the final income of the native growers depends also upon the maintenance of a sufficient measure of competition to ensure them a fair

¹ See H. B. Thomas and R. Scott, *op. cit.*, pp. 142-3.

² *Ibid.*, p. 122.

share of the selling value. Already the limited number both of ultimate consuming undertakings, and of exporting agencies through whose hands the produce must pass, makes possible the fixing of prices for exports at a lower level than might prevail under more competitive conditions. In some cases they are being superseded by the growth of co-operative organizations for the more direct marketing of the crop.¹ It may prove to be an added advantage of co-operative marketing that it will strengthen the bargaining power of the grower as against the consumers and merchants.

Throughout West Africa the Syrians have in recent years come to take a prominent part in commercial activity; all over the Gold Coast, Syrian stores predominate. Besides trading in imported goods they are engaged in road transport and as brokers in the cocoa trade. They provide most of the money-lending facilities, from large-scale finance to petty pawnbroking.

In addition to facilities for marketing export crops, there are large and numerous markets dealing in local produce of every kind. This petty trade is, as everywhere, largely in the hands of the women. Both in Nigeria and the Gold Coast there is evidence of an increasing specialization of particular areas in particular crops, and internal trade in foodstuffs between one area and another. The coastal towns in particular are becoming dependent upon outside sources.

These marketing facilities are in part a consequence, in part a necessary condition, of a much more extensive practice of specialization and exchange than is to be found elsewhere in Africa. In the Northern Province of Nigeria, at the census of 1931, about 84 per cent. of occupied males whose returns permitted them to be classified were shown as engaged in agriculture and fishing, about 9 per cent. in manufacture, and under 3 per cent. in commerce and finance. The predominance of agriculture was to be expected, since even those who are partly engaged in other and more specialized tasks are often primarily subsistence farmers. An intensive census of a small sample of the population made it possible, however, to glean some information regarding these subsidiary occupations. Of 214,452 males of the chief tribes covered by the intensive census, 69,583 were unclassified, living on private means, retired,

¹ See Chap. XXI, pp. 1474-7.

or not gainfully occupied. Of the remainder, 80 per cent. were engaged primarily in agriculture, about 6 per cent. in manufacture, some 5 per cent. in personal service, and a little over 3 per cent. in commerce and finance. Of these, 43,159 had subsidiary occupations, of which 'manufactures' included 27,079, commerce and finance 4,935, and professions, &c., 3,278. A further 6,752, who had presumably been classified under manufactures, commerce, or some other service as a main occupation, showed agriculture as a subsidiary occupation. Of the women covered by the general census, as many as 493,863 out of 2,179,960 returned themselves as occupied in manufactures. Of these more than seven-eighths were spinners, weavers, or dyers.

For Southern Nigeria less detailed information is available. The returns, which are less reliable than those for Northern Nigeria, would suggest that the proportion of males engaged in agriculture is about 82 per cent., and that concerned with handicrafts about 4.7 per cent. For the Gold Coast no strictly comparable figures are available. But such details as are available show there also a gradual emergence of a class of craftsmen and traders depending for part at least of their livelihood upon the sale of their products and services.

The more highly developed economy of West Africa has resulted in a far greater degree of urbanization than is to be found elsewhere. In Nigeria as a whole, some 29 per cent. of the population was living in 1931 in towns of over 5,000 inhabitants; those of the Northern Provinces had grown by 38 per cent., and those of the Southern by 27 per cent., during the decade. Ibadan had an estimated population of 387,133, Lagos of 126,108, and Kano of 97,031.

(d) Native Economic Development

If we attempt to consider in more concrete terms the possible steps that may be taken to promote native economic development, it is important to remember that there are two main limitations to industrial progress. The first is ignorance of technique; the second is lack of capital. It is of little service to teach a technique which requires tools and equipment entirely beyond the purchasing power of the native craftsman. European teachers are, despite

themselves, often ill suited to teach African natives the rudiments of new crafts. For, apart from a few trades such as building and leather-working, in which handicraft still persists in Europe, the technique that requires to be taught is obsolete, or continues, as in hand-weaving, only as an artificial survival from a less mechanical age.

The African could in many cases learn more readily from association with Indian craftsmen, who practise as a living art the processes which he requires to learn and who suffer the same disabilities from lack of capital to buy expensive equipment. If Indian rather than European contacts had affected African techniques, we might have expected to see a development of the potter's skill and the use of the potter's wheel, the growth of cotton and wool spinning and weaving by elementary and simple methods, the improvement of metal-working and the introduction of the manufacture of brass-ware. Such trades, as practised in many parts of India, are not beyond the immediate capacities of African workers, and require little capital. If the scope of the contacts with Indian settlers could be somewhat modified, and become less commercial and more industrial, there is probably no country from which Africa could for the moment learn more. In the meanwhile, however, technical education rests largely, like all education, upon the shoulders of governments and of the missionary societies. In planning their work they will do well always to bear in mind the two chief difficulties of a native craftsman: first, his lack of capital, and second, his difficulty as a specialist in fitting into a society that is not yet fully specialized; and the importance therefore of developing a system of exchange *pari passu* with a system of specialization.

Any generalization regarding the industrial capacities of African peoples would almost certainly be misleading. That they are capable under careful European supervision of routine mechanical work in railway workshops and in the mining undertakings in the Belgian Congo and West Africa, is beyond question. They drive the trains on the railways of Nigeria and other British West African territories and in some of the French and Belgian possessions. They are becoming skilful, if somewhat erratic, motor-drivers and mechanics. They are by degrees acquiring some proficiency in the

building trades. In parts of British and French West Africa and the Congo an inherited craftsmanship has established a foundation stock upon which new techniques can be grafted, and the introduction of newer methods into the textile and wood-working trades is in no way prevented by lack of possible skilled workers. But in many other parts of Africa it would be idle to suggest that the ordinary tribesman yet possesses either an inborn dexterity or a quickness of intelligence that will enable him rapidly to master the use of new tools and the essentials of new methods. Mechanical education must go hand in hand with mental education, and the pride in good work and the sense of responsibility, which must underlie good craftsmanship, may prove more difficult to inculcate than the purely manual skill. But the effective limitation to progress may not improbably be found to lie less in the difficulties of developing the mechanical abilities of individuals than in those of creating the general environment in which they can be employed, and of training simultaneously and in proper balance men to fill the wide range of complementary and supplementary occupations for which modern industry calls.

Once granted the requisite technical ability and the requisite setting, it is clear that the further economic development of the native population, and the place that must be taken by European or other alien entrepreneurs, are closely inter-related with the problem of the supply of capital and credit to small borrowers in Africa. It is as owner and provider of capital, as well as of technique and knowledge, that the European plantation undertaking possesses an advantage over the native grower. It is from advantages in the terms on which they may buy, and the credit which they can secure, as well as from superior skill and intelligence, that the Indian or Syrian traders largely derive their predominance. Moreover, the transition from a shifting agriculture to a permanent mixed farming,¹ such as is being attempted in Nigeria and elsewhere, must progressively result in a need for capital for permanent improvements, such as buildings and equipment, and for agricultural credit to finance growing crops and for other similar purposes. But the problem of the supply of capital to natives in Africa is particularly difficult. Only a very small pro-

¹ See Chap. XIII, pp. 962 ff.

portion of the whole native population has yet reached a stage of education and responsibility which would make it likely that they would use credit wisely, and with a proper balancing of the consequences to income and outgoings.

For the moment any widespread development of facilities for the provision of capital and credit would probably be premature, and might well lead to the accumulation of debts incurred for extravagant standards of expenditure, such as have proved a very serious social and economic problem in India.¹ But there are, as was suggested in dealing with the subject of private rights in land, certain parts of Africa where a mechanism for the supply of capital must before long become desirable.

There is, however, one substantial obstacle to such developments. Capital for agriculture is ordinarily provided in one of two ways. Where there is a landlord-and-tenant system, a large part of the fixed capital is provided by the landlord. Where the farmer is himself the owner of his land, he borrows ordinarily by mortgaging it. In Africa there is, with few exceptions, neither a landlord class owning the land and able to invest in its improvement nor a class of individual owner-cultivators of the soil, and the individual tenure scarcely anywhere exists which would permit the land to be mortgaged and, if necessary, surrendered.² Thus it may not prove easy to develop a system of agricultural credit. Such credit as is at the moment available takes chiefly the form of cash advances against growing export crops which have been sold by contract to merchants. For the present this method of finance probably suffices, but where more elaborate equipment begins to require longer-term capital, African institutions, as now constituted, make it difficult to provide the necessary security.

These difficulties of the provision of capital raise a wider issue. If economic progress is to be made easy, it must operate in a social and legal framework suited to it. There are three pre-requisites to development. First, the existence of a law of property which will make capital-raising easier; second, the existence of a law of property which will give sufficient individual incentive; third, the existence of a law of contract which can be enforced with certainty. It has already been pointed out that in parts both of East and West

¹ See Chap. XII, p. 715.

² See Chap. XII, pp. 829 ff.

Africa the custom of communal land tenure is beginning to yield to one of individual holding, and some suggestions have been made regarding the form which title might take, if and when economic and social conditions render it advisable to recognize it.¹ But it need not follow from this that individual tenure is the only solution. If, for example, the tribal unit could become an economic as well as a political unit, raising capital against the value of the tribal lands, acting as a co-operative bank and selling organization, and taxing individuals through a rent upon their holdings, a rapid transition to individual ownership of land might possibly be avoided. But any such development assumes a roughly parallel progress of all the individuals in a given community. Some form of individual title is in any case necessary, as has been seen in Southern Rhodesia, where the rate of progress is not uniform, and individuals wish to break away and use more improved methods than their neighbours.²

Regarding the essential conditions for a sufficient incentive to stimulate individuals to undertake new activities, any dogmatic generalization would almost certainly be misplaced. In primitive societies direct incentive has sometimes been less effective than a traditional requirement for a generous reciprocity of gifts. In European conditions no system of incentives is usually to be found within the family itself. What incentive will in the long run prove necessary in African conditions, must depend upon the strength and persistence of family and tribal ties and the psychological consequences of increasing contacts with the more highly individualized European economy. In the towns and at the mines in the Union, and in the ports of the West African territories, it would appear that to an increasing extent individuals are coming to regard their earnings as related to their own activities and within their individual disposal. Remittances of money and the presents taken home represent usually, it has been seen, no more than a small proportion of the total earnings. The problem of the relation of ownership to incentive becomes more difficult when we consider the problems of saving and capital investment, which must become increasingly important. If an individual is to deny himself in the present, it is necessary that he should feel that only that

¹ See Chap. XII, pp. 868 ff.

² See Chap. XII, pp. 736 and 847.

group should ultimately benefit which has either shared in the thrift, or whose satisfactions he values equally with his own. While it would be premature to attempt to forecast with certainty the ultimate consequences of the need for incentives in an increasingly differentiated society, it is clear that its relation to the law of property must become of growing importance.

The need for an effective law of contract is obvious. If craftsmen are to undertake work of specialized character to meet the needs of a particular customer, they must be in a position to enforce the contract to pay for it. And where there is group ownership of wealth, it must be clear who may and may not be able to exercise control over it, to the extent of making contract to dispose of it. If a system of contracts is to be workable in the ordinary day-to-day business of native life, it must be enforceable in the native courts; but though it may be desirable to avoid the complications of European legislation, the matter cannot be left entirely to the vagaries of tribal custom. However simple may be the form which a law of contract takes, it must be uniform throughout the whole area in which contracts may arise.

The native economy of Africa is almost everywhere in a state of change. New knowledge, new markets, new contacts, new forms of transport, growing populations, the suppression of warfare, and a new division of labour between the sexes are all contributing to break down the old framework of social and economic life. The need to pay taxes, the opportunity to grow export crops, and the desire to buy imports, are bringing the African increasingly into contact with world markets. It is easy to regret the passing of traditional habits and systems, and to deplore many of the less attractive phenomena of progress. To attempt to resist these changes would be profitless. But to guide and control them is not impossible, and the ultimate forms of economic organization may depend largely upon decisions, as for example regarding the forms of land tenure, made at this stage. The administrations in Africa have an opportunity which was denied to the earlier British administration in India, not merely by the existence of the strongly entrenched social customs of India, but by the dominance of the doctrine of *laissez-faire* at the most formative period of British rule.

IV. PUBLIC FINANCES

The chief point of interest in a colonial budget is the relation between the overhead expenditure on general administration (including the payment of fixed interest charges) and the provision made for outlay on development. It is not, however, possible to distinguish accurately the amount of expenditure on the 'nation-building' services; a judiciously designed road programme may be more truly an item of nation-building expenditure than the opening of a series of industrial schools; and the liberal employment of Africans in the administrative services, or even in a commercialized department, may do more to advance their status than a large outlay on experimental farms. Even the fixed interest charges may represent capital expenditure on work which is in the best sense nation-building. In the accompanying table,¹ which analyses the estimated expenditure for 1936-7 in the British dependencies, some attempt has been made to distinguish in broad outline the figures of expenditure on 'economic development' and those on 'social services'. These figures must be examined in the light of the observations just made, and for practical purposes it is also advisable to consider the two heads together, since the distinction between them is little more than conventional. They also need modification in one respect. Thus, in the case of territories such as Nigeria or Tanganyika, it is necessary to add also the figures of expenditure by the native treasuries; in Nigeria, for example, the expenditure on the combined heads, namely 29.3 per cent. of the total, must be increased on this account to about 39.3 per cent. There is, as will be seen, a considerable divergence in the scale of expenditure of the class under discussion. The low figure for Northern Rhodesia is partly explained by the high level of debt charges, due largely to expenditure on the new capital. In Kenya the proportion was 36.5 per cent., in Uganda 40.9 per cent., and in the Gold Coast 44.3 per cent. But with large populations to administer and a small total revenue, the expenditure per head upon social services and economic development combined is in most cases very small by European standards. Social services

¹ Both the figures and their distribution between different categories are derived from *An Economic Survey of the Colonial Empire*, Colonial 126, 1935.

TABLE XIII
Analysis of Expenditure, on the Basis of the Estimates for 1936-7

Territory	(1) Deficit of self- balancing de- partments		(2) Debt charges other than railways		(3) Administra- tion		(4) Economic de- velopment		(5) Social services		(6) Defence		(7) Non-effective pensions, &c.		(8) Total expendi- ture (other than self-balancing departments) £,000's	(9) Approximate expenditure on (4) & (5) per head of population shillings
	£ 000's	Per cent.	£ 000's	Per cent.	£ 000's	Per cent.	£ 000's	Per cent.	£ 000's	Per cent.	£ 000's	Per cent.	£ 000's	Per cent.		
N. Rhodesia	2	0.3	120	16.2	300	40.6	69	9.4	161	21.9	20	2.8	65	8.8	737	3.4
Nyasaland	18	4.2	68	15.8	153	35.9	53	12.4	85	19.8	19	4.4	32	7.5	428	1.7
Tanganyika	59	3.3	137	7.7	831	46.6	242	13.5	327	18.3	102	5.7	87	4.9	1,784	2.2*
Kenya	—	—	201	9.9	788	38.9	294	14.5	447	22.0	83	4.1	214	10.6	2,028	4.8
Uganda	—	—	135	8.4	674	41.8	236	14.7	421	26.2	51	3.1	94	5.8	1,611	3.6
Zanzibar	—	—	2	0.4	234	54.9	47	11.0	93	21.9	—	—	51	11.9	427	11.9
Nigeria	83	1.9	956	21.4	1,307	29.3	515	11.5	794	17.8	294	6.6	512	11.5	4,460	1.3*
Gold Coast	224	8.0	104	3.7	888	31.6	459	16.3	789	28.0	107	3.8	243	8.6	2,814	7.4
Sierra Leone	57	9.4	43	7.2	197	33.0	72	12.0	140	23.3	35	5.8	56	9.3	598	2.2
Gambia	4	1.8	2	1.1	98	50.5	24	12.4	41	21.0	10	5.1	16	8.1	194	6.5
Basutoland	—	—	—	—	111	38.0	59	20.0	110	37.4	—	—	13	4.6	293	5.6
Bechuanaland	—	—	—	—	83	43.7	50	26.6	40	21.1	—	—	16	8.6	189	11.7
Swaziland	—	—	3	2.7	49	38.9	29	22.7	41	32.2	—	—	4	3.5	127	11.0

* This does not include expenditure for these purposes from native treasuries. In Nigeria there was a total expenditure by treasuries of about 1.3s. per head of population of which about 0.5s. was devoted to economic development and social services. In Tanganyika expenditure from treasuries on development, &c., was only equal to about 0.2s. per head. In Nyasaland it was slightly less.

cost £6.15 per head in Great Britain in 1934. In the estimates for 1936-7 it is highest in Zanzibar at about 11.9s. per head. It is lowest in Nyasaland and Nigeria, where, including expenditure from native treasuries, it is a little under 1.9s. per head. It is less than 2.5s. per head in Sierra Leone and in Tanganyika, and under 3.5s. per head in Northern Rhodesia. As the revenues of the territories improve, it may be expected that the ratio of expenditure on these two combined heads will steadily increase. One of the difficulties of colonial finance lies in the fact that it is necessary to begin by constructing at considerable expense (and often with the aid of loan capital) the framework on which social advance must subsequently be built. Once the framework is constructed, administrative charges do not necessarily expand in proportion to the advance of the territory. If there is an increase of purely administrative expenditure in the future, it is likely to be mainly in the expansion of the judicial or police services, or the creation of Land Survey or Registration Departments. But this expenditure is not likely to be such as seriously to increase the ratio of the administrative to other heads, while the development and social service heads will, apart from the normal increase in their share of general revenues, receive an indirect addition from the growth of local government institutions with power to raise their own resources.

The financial position of the different British territories reflects closely their relative economic strength. The circumstances of the Union differ so fundamentally from those of the newer and less populated colonies that it will not here be discussed in detail. The existence of the gold-mining industry has provided it with the taxable capacity requisite to its ordinary needs; it is noteworthy that special mining taxation was responsible in 1935-6 for 26.95 per cent. of the revenue, and the taxation of mining incomes for a considerable additional share of the whole. The total tax revenue of the Union Government and of the provincial administrations has risen from £9,700,000 in 1913 to £36,700,000 in 1935. The total debt, as was pointed out in the last chapter,¹ has risen during this period from about £119,000,000 to about £248,000,000, but the increase in the foreign debt has been small, and more than half of the whole is now internal.

¹ See Chap. XIX, p. 1324, and S. H. Frankel, *op. cit.*, p. 176, Table 35.

The finances of South-West Africa have always been difficult.¹ In the years of German administration lavish help was given to the colony. From 1904 to 1910 the Imperial Government met annual deficits on the administration to the extent of over £14,000,000, in addition to the war expenditure between 1904 and 1908 of over £23,000,000. After 1908 the Imperial Government paid at first the whole and later two-thirds of the cost of garrison and police services. The revenues of the territory in the early years were meagre, but after the discovery of diamonds in 1908 they increased considerably. When the Union Government received the mandate in 1920 the deficits of the occupation period, 1915-20, were not made a charge on the territory, and for a short time, largely in consequence of windfalls, it appeared to be enjoying a substantial surplus, and important development works were put in hand. In 1921 revenue was £870,930, of which £547,419 was derived from mining receipts. Ordinary expenditure was £642,747, and extraordinary expenditure, mainly of a capital nature on irrigation and public works, was £192,160. The main cause of the subsequent difficulties of the territory has been the decline of the mining revenue; in 1932 ordinary revenue was reduced to £357,388, whereas ordinary expenditure was £602,964.

Since that year there has been a considerable recovery of revenue, to £669,140 in 1936, largely in consequence of increases of customs and mining receipts. From 1926 to 1937 the borrowings of the territory from the Union Government have amounted to £2,570,266, of which £1,183,272 has been for the purpose of meeting deficits on ordinary expenditure. Of the ordinary expenditure of £804,185 in 1936, as much as £183,253 was required to cover interest and redemption charges. During 1937 the Union Government agreed to place these loans and the interest charges upon them in a suspense account, and to permit the territory to postpone interest payments until the financial position improved. Education is a heavy expense with so scattered a European population, and received £146,692 in 1936. The total expenditure on natives, including administration, was £51,515. The total debt

¹ For the past history and for recent examinations of the problems involved see *Report of the Commission on the Financial and Economic Relations between the Union of South Africa and the Mandated Territory of South-West Africa*, U.G. 16, 1935, and *Report of South-West Africa Commission*, U.G. 26, 1936.

of the territory, including interest-bearing capital of the railways and the loans of the Union Government, was estimated by the South-West Africa Commission to be £3,671,900, equivalent to £131 per head of European population and £29 14s. per head of all population.

Southern Rhodesia, though it shares with the Union the advantage of a relatively prosperous mining industry, which contributed some £78,000 in licences, £186,000 in royalties, and £273,000 in income tax in 1936-7, shares with many of the African territories the difficulties arising from the administration of a large and low-populated area, with the added disadvantage that the standards of administration are dictated by the requirements of a white population. Of a total expenditure of £3,017,573 for the year 1936-7, the service of loans absorbed £471,050. Defence, including the cost of the British South Africa Police, required a further £325,467. The cost of European education was £332,321, and that of hospitals and dispensaries, mainly serving European needs, was £159,250. Native administration required £161,848, and the amount available for native development, which includes native education, was £78,338. The balancing of the budget was, until the recent rise in the price of gold, never easy. From its foundation until 1905, and from 1912 onwards, the Chartered Company's expenditure exceeded its revenue, and the Company estimated its accumulated deficits at £7,886,117 up to 1918. From 1921, however, the revenue has in general exceeded expenditure, and the deficits of occasional years have been small,¹ but the accumulated surplus was no more than £100,345 in March 1937. A public debt was first created in 1924 with the flotation of a loan of £3,000,000, mainly for the purpose of providing the colony's share of £2,000,000 in the compensation of £4,435,225 awarded to the Chartered Company. It has since been gradually increased to £10,898,263 at March 31, 1937. At that date it was about £192 per head of European population and about £8 10s. per head of all population.

Northern Rhodesia, in the years of the administration of the Chartered Company, suffered from a similar history of continuous deficits, which at the time of the negotiations between the Com-

¹ See S. H. Frankel, *op. cit.*, p. 233, Table 55.

pany and the Imperial Government were estimated to amount to £1,660,000.¹ When the Imperial Government became responsible for the finances, the régime of deficits continued, and grants-in-aid were for a time necessary, amounting in 1924-5 to £138,000 and in 1925-6 to £100,000. A new phase began with the development of mining in the years following 1928; customs revenue, for instance, which in 1926 was £100,000, rose to £321,000 in 1931. On the basis of the added revenues considerable expansions both of recurrent and capital expenditure were permitted. The recurrent expenditure, which in 1926 was £376,000, had risen in 1931 to £769,000. But in 1932 there was a serious setback; the end of the period of construction of the copper undertakings, in which large numbers of Europeans and natives had been employed, coincided with a collapse of the price of copper and a severe restriction of output. As a result, revenue fell to £600,000. An inquiry into the finances of the territory resulted in a general reduction of activities; the building of the new capital at Lusaka, which had recently been begun, had for a time to be considerably curtailed. There had been a surplus of £125,000 in 1930-1; despite retrenchment there was a deficit of £177,000 in 1932-3, and it was not until 1935 that a small surplus reappeared. Sir Alan Pim's investigation has made clear the dangers of embarking upon large recurrent expenditure on the basis of a temporary increase of revenue, and the importance of adequate reserve funds in a territory whose prosperity is so intimately connected with the fortunes of a single, and fluctuating, industry. The improvement in the earnings of the copper mines since 1934 has been the main source of the recovery of revenue, which was estimated to amount to £905,000 in 1937 and £1,361,000 in 1938. The receipts from mining are, however, much reduced by the fact that the companies working the copper are not registered in the territory. Instead of receiving the full local rate of tax, four shillings in the pound, the territory receives ordinarily only a half share of the United Kingdom tax. The Chartered Company retains the royalties in perpetuity, and these contribute only through taxation to revenue.² Thus, although mining is not taxed more lightly than

¹ See *Report*, op. cit., Colonial 145, 1938, p. 86 and Appendix IX, and S. H. Frankel, op. cit., p. 255, Table 61.

² See Chap. XXII, p. 1531.

elsewhere,¹ a relatively small share contributes to the finances of Northern Rhodesia. The public debt was first incurred in 1924. At the end of 1936 it amounted to £2,347,000. A further £262,000 had been lent by the Colonial Development Fund, of which £240,000 was re-lent to the Rhokana Corporation for the construction of an electrolytic refinery. The loan expenditure has been largely upon the new capital and other government buildings, which have together absorbed about £969,000, up to the end of 1936; roads and telegraphs have taken a further £585,000. Municipal services, such as gas and water supplies, mainly in the railway strip and copperbelt, have required £193,000. Some assistance in meeting the annual debt charges, which now amount to about £131,000, has been temporarily received from the Colonial Development Fund and the Beit Trustees. The foreign debt is now approximately £250 per head of the European population, and about £1 18s. per head of all population.

The budgetary problems of Nyasaland are those of a relatively poor territory, enjoying no revenue from mining, and burdened with high charges upon railway developments. The ordinary revenue of 1936 was estimated to be £395,350. There has been no such violent fluctuation of receipts as has been seen in territories more dependent on mining, and they have varied by less than £20,000 since 1928. To the total, customs and dues contribute about £150,000, and native tax about £125,000. The ordinary expenditure rose slowly from £396,799 in 1929 to £418,616 in 1934. There was a jump to £606,960 in the budget of 1936; this was mainly the result of an increase of debt charges from £61,175 to £230,832. The debt was incurred to enable the territory to take part in the operations for financing the railway extensions and the construction of the Zambesi Bridge, which will be described in detail in Chapter XXIII.² The loans are guaranteed by the Imperial Government, and until 1936 the interest payments were partially met from a grant of £500,000 from the Colonial Development Fund. Since the exhaustion of that sum the charge has fallen upon the Imperial Exchequer and required a grant-in-aid in 1937 of £161,271. A 'standard revenue'

¹ See *Report*, op. cit., Colonial 145, 1938, pp. 135-6.

² See below, p. 1577.

of £450,000 has been agreed between the British Treasury and the Nyasaland Government, so that any revenue below this total is within the disposition of the government of the territory, while half of any excess above it is applied to meeting the interest on the Treasury loans and the guarantee payments to the railway. Thus the territory will only be self-supporting if as the result of these developments taxable capacity is more than doubled. The public debt, including Exchequer loans, is a little over £5,000,000 and is equivalent to £3 2s. per head of all population.

Tanganyika suffered far more severely than did Nyasaland from the effects of the late depression. Revenue fell from £1,993,000 in 1929 to £1,522,000 in 1931, largely as a result of the decline of customs revenue; since 1933 there has been a rapid recovery. In 1936 there was a surplus of £176,593 after making special allowances to reserve funds, and there has been a further substantial surplus in 1937. The revenue in 1937 was £2,244,659. To this, customs contributed £727,000 and licences and taxes £876,000. Of the latter the native tax is the largest element, having in recent years brought in about £650,000. Like South-West Africa, Tanganyika received substantial grants-in-aid from the German Imperial budget before the War. In the years immediately following the War there were large deficits. A surplus first appeared in 1924, and they continued until 1929. From that year until 1935 there were continued deficits. Part of these has been met by borrowings from the British Treasury, to which the territory has a debt of £3,121,031. Of this a little over £2,000,000 was to enable the railway to make capital expenditure as well as to capitalize its arrears of interest. There is a further debt of £5,570,000, mainly for railway improvement, guaranteed by the Imperial Government under the Palestine and East Africa Loans Act of 1926, and a subsequent Act of 1932. On rather more than £1,000,000 of the Exchequer loans, no interest is being charged. This debt is equivalent to about £1 14s. per head of all population.

Of the expenditure in 1938, about £139,000 was required for debt charges, about £201,000 for provincial administration, and £257,000 for military, police, and prison services. About £157,000 was the estimated grant to the native administrations. The finances of the territory have until lately been embarrassed at

frequent intervals by the deficits of the railways. The separation of the railway accounts has now been completed, and during the years since 1935 the railways have earned enough to cover not only their recurrent expenditure but also their debt charges. They have not, however, been able to provide fully for depreciation or renewals, and the general revenues of the territory have been required to give assistance.

The recent financial history of Kenya, Sir Alan Pim suggested,¹ may be divided into three periods: 'the first of economy from 1922 to 1924, then of general expansion and lavish expenditure from 1925 to 1929, followed by steadily increasing depression and enforced economies from 1930 onwards'. The budget of Kenya differs from that of most other territories in that the interest charges on the railway are included in the expenditure, and are in an ordinary year offset by a reimbursement from the Kenya and Uganda Railway administration. Including these cross payments, the expenditure of 1922 was £1,909,051, of which £249,963 was required for interest payments; reimbursements covered £198,232 of this. Medical services received £145,332, agriculture £92,958, and education £56,118. The total revenue, £1,649,032, was derived to the extent of £506,414 from the native hut and poll tax, and of £387,530 from customs. By 1930 expenditure had risen to £3,114,912. This included £814,683 for interest payments, £236,934 for medical services, £160,804 for agriculture, and £180,734 for education. The total recurrent expenditure was reduced during the years 1931-3 to about £90,000 below the maximum of 1930. In 1934 and subsequent years expenditure has again risen above the level of that year. The expenditure upon agriculture has, however, been curtailed by some £35,000 and that on medical services by about £40,000. Interest charges, on the other hand, have risen, and in the budget of 1937 were estimated to require £1,054,502. During the depression years ordinary revenue declined from a maximum of £3,333,742 in 1929 to a minimum of £3,006,611 in 1932, mainly as a result of a decline in customs revenue from £949,725 to £597,262. The result was a series of deficits which, if non-recurrent items of income and ex-

¹ *Report of the Commission on the Financial Position and System of Taxation of Kenya*, Colonial 116, 1936, p. 18.

penditure are included, amounted to £171,331 in 1930, £197,274 in 1931, and smaller amounts in the two following years. The estimated revenue for 1937 was £3,436,322; to this it was expected that customs and excise would contribute £740,000, native hut and poll taxes £540,000, the income tax £83,500, the non-native poll tax £52,000, and reimbursements (mainly from the railway) £1,051,824.

At the end of 1936 the public debt of the territory amounted to £17,580,600. Of this, £5,000,000 was borrowed in 1921 at a rate of 6 per cent. and at an issued price of £95. A further £5,000,000 was borrowed in 1927 at 5 per cent. The interest and sinking-fund charges are thus for the time being very heavy. There is a further contingent liability to the British Treasury in respect of the £5,502,592 which represents the cost, borne by the British Government, of the original construction of the Kenya-Uganda Railway. While it has been recognized by the Colonial Office as a liability of Kenya, no payment has ever been made; down to 1912 the colony required a grant-in-aid, and an increase of that sufficient to make possible the payment was considered an unnecessary complication. When the grant subsequently became unnecessary the financial position of the territory made it difficult for the payments to be undertaken. Sir Alan Pim recommended in 1936 that the colony should be relieved of the burden. If this debt be omitted, the remainder is equivalent to about £977 per head of European population or £5 14s. per head of all population.

Uganda, like Kenya, for some time required a grant-in-aid, progressively reduced from £204,000 in 1900 to £96,000 in 1910 and finally extinguished in 1914. Expenditure, which before the War was about £250,000 annually, had increased to over £1,000,000 by 1925 and to £1,643,293 by 1930.¹ It was somewhat curtailed during the depression, largely by reduction of public works, but had increased again to £1,624,073 in 1936. This figure included £137,598 for debt charges. The public debt is no more than £2,235,600, equivalent to about 12s. 7d. per head of all population. A little under half of the interest charges are reimbursed by the railway administration. In consequence of these relatively low debt charges there is a large surplus available in

¹ See Uganda Protectorate, *Annual Report by the Treasurer for 1936*, p. 13.

ordinary years above the essential needs of administration and the other fixed obligations of the government for expenditure upon public works and other forms of economic and social development.

Thus the 1937 budget provided for £2,011,417 of expenditure, of which £1,489,959 was recurrent. The remainder was extraordinary and other special non-recurrent expenditure, mainly upon public works and equipment of a capital nature. Of a total revenue of £1,712,940 in 1936, £496,709 came from customs and excise. About £560,000 came from the native poll tax, and about £31,000 from the non-native poll tax. A tax on all cotton grown in the territory yielded slightly under £129,000. Of the expenditure of the same year, the provincial administration required approximately £115,000, pensions £108,000, native affairs £157,000, medical services £164,000, and education £80,000. The reserves and accumulated surplus are considerably greater in relation to annual expenditure than those of most other territories. They amounted at the end of 1936 to £1,695,902.

The financial problems of Nigeria have been dominated by two factors, the wide fluctuations of revenue, and the deficits of the railway administration. The revenue, which was £6,305,000 in 1927, had fallen to £4,858,000 in 1931, and rose again to £6,260,000 in 1936. Customs revenue, which was £3,541,000 in 1927, fell to £2,077,000 in 1931 and was £3,624,000 in 1936. This variation reflects the wide changes in the values of the produce of Nigeria, more particularly those of tin, cocoa, and palm products. The railway has been from the first an instrument of colonial development, and the deficits have been regarded as a necessary consequence. Since the traffic has been dependent upon the volume of agricultural exports and upon the imports which could be purchased with them, the receipts have fluctuated greatly. Until 1927 the gross revenue and expenditure of the railway appeared in the general budget. From that year only the railway surplus or deficit was included. Since 1936 the railway finances have been more completely separated. The general budget has been made responsible for an annual contribution to the railway of £214,000, representing the interest charges on the Enugu-Kafanchan branch, which was built mainly for development purposes,¹ and the capital

¹ See Chap. XXIII, p. 1585.

investments in the railway made from government balances have been written down and the rate of interest reduced. The railway has been made responsible for its own interest charges, for a sufficient payment to a renewals fund, and for the building up of a reserve. It is hoped that by these means the railway administration will have a more clearly defined financial task, and that the annual obligations of the government will be more constant and more easily foreseen.

From 1927 to 1933 Nigeria suffered a continuous series of deficits. During the following years, under the governorship of Sir Donald Cameron, the finances were thoroughly overhauled and a small surplus appeared in 1934, insufficient, however, to meet the necessary payments to the railway renewals fund. In subsequent years there have been increasing surpluses. To the total revenue of 1936 mentioned above, the main contribution apart from customs was that from direct taxes, which yielded £851,800, of which only £13,887 was the product of the non-native income tax. Of the total expenditure of the same year, £288,212 went as special payments to the railway renewals fund and the supplementary sinking funds. The public debt charges required £944,087 in addition to the sum of £761,092 which was the interest charges of the railways. The total outstanding debt of the territory in 1937 was £24,764,599, equal to about £1 4s. 6d. per head of population. Of other expenditure, provincial administration required £419,553, medical services received £387,600, agriculture £111,257, education £247,795, and public works £780,604. It must be remembered that the expenditure from native treasuries is not included in these figures. Their expenditure amounted to a further £1,478,456 in that year. The accumulated surplus at the end of the year 1936-7 was £2,819,575. There were holdings of £909,996 of cash and £3,837,335 of investments against this surplus and the various outstanding liabilities of the territory.

The Gold Coast is like Nigeria in suffering from large variations of revenue. It fell from £4,112,000 in 1927 to a minimum in 1931 of £2,284,000, and, as in Nigeria, the principal cause was a decline of customs revenue from £2,410,000 to £1,474,000, largely accounted for by the gradual abolition of gin imports after the

imposition of the Liquor Traffic Ordinance. The revenue from spirits and other liquor fell from £1,509,901 in 1927 to £193,248 in 1934. The buoyant revenues of the years 1919-27 had led the government to a cautious but steady increase of expenditure. By the budget of 1928 recurrent expenditure had risen to £2,552,809, amply covered by an estimated revenue of £3,422,476. An estimated extraordinary expenditure of £602,983 was calculated to leave a surplus of £266,684. The reserves and accumulated balances were so strong as to suggest confidence in a steady advance of the territory and an increase of expenditure upon development services. The subsequent years, however, showed such reductions of revenue that first extraordinary expenditure, and later the recurrent expenditure, had to be severely curtailed, and between 1929 and 1932 the European establishment of the territory had to be reduced from 1,281 to 437. Revenue began to increase in 1932, and from 1933 there has been a small surplus, which has made possible an increased expenditure upon public works, and a restoration of some of the more essential services that had been retrenched during the depression. The 1936 estimates provided for recurrent expenditure about £127,000 greater than that of 1933 and for extraordinary expenditure £491,000 greater. Increased payments have been made to the railway renewals fund and to reserve funds. The anticipated excess of assets over liabilities at the end of the year 1936-7 was £855,765. The public debt of the colony was £11,435,000, requiring interest and sinking-fund payments of £559,719. Of this, £104,148 is borne by the general budget and the remainder by the railways and by Takoradi harbour. The debt is equivalent to about £3 5s. per head of all population. Of the budgeted expenditure of 1936-7 the political administration required £123,630, and pensions of all kinds £243,190. The Medical Department received £320,288, Education £184,546, and Agriculture and Animal Health £101,966. The chief source of revenue was customs duties, estimated to yield £2,227,790 out of a total of £2,924,515. To this total, export duties on cocoa, gold, and diamonds were expected to contribute £274,000, £200,000, and £42,000 respectively. A profit tax yields about £30,000, royalties about £70,000, and the remainder comes from a wide variety of fees and licences.

Sierra Leone has encountered difficulties during the depression very similar to those of the two larger West African territories. Ordinary revenue fell from £771,657 in 1928 to £559,907 in 1934. Since 1935 there has been a substantial surplus, and the 1937 budget provided for a revenue of £785,414, for a recurrent expenditure of £672,793, and an extraordinary expenditure of £74,985. The main source of revenue is customs, estimated to produce £420,000, of which £82,000 is from export duties on palm kernels and kola. The native house tax produces £78,500, profits tax £85,000, and the non-native poll tax £5,100. The provincial administration required £62,558 and pensions £61,710. Education received £41,714, medical services £56,890, and agriculture £17,845. Public works received £74,038 for recurrent and £35,972 for extraordinary purposes. The loss incurred by the railway and a subsidy to it absorbed £61,794. Public debt charges required £100,736, of which £43,085 was borne by the general budget and the remainder by the railway. The total debt is equivalent to some £1,718,259, about 19s. 5d. per head of all population. The accumulated surplus at the end of 1937 was expected to amount to £246,792.

It is convenient at this point to summarize the assistance given by Great Britain to its African dependencies. This assistance takes a variety of forms. In the first place help is given to individual territories, sometimes by grants-in-aid of local revenues, sometimes by loans-in-aid, sometimes by interest-free loans. Less direct and less easily measurable help is given by guarantees of loans, imposing a contingent liability upon the British Exchequer. In addition to these forms of direct assistance, borne chiefly upon the Colonial Office Vote, but in the case of the South African High Commission Territories upon the Dominions Office Vote, grants and loans are made indirectly through the Colonial Development Fund, which itself receives an annual grant, which amounted in 1938 to £650,000.¹ In the second place help of a general nature is given to the colonial territories in several ways. The costs of the squadrons of the Royal Air Force serving in Africa are borne by the imperial budget, though their presence often contributes to

¹ Under the Colonial Development Act, 1929, such sums may be paid to the Fund as Parliament may decide, but not exceeding one million pounds in any year.

local as well as general security. The military defence of African territories, on the other hand, is paid for out of local revenues, though in some cases it may be said to serve imperial as well as local ends; thus it is sometimes claimed that the military expenditure upon the northern boundary of Kenya is not solely in the interest of that colony.

Apart from these imponderable elements, there are grants to certain institutions of common interest to all or many African territories. Reference is made in Chapter XXIV¹ to the Imperial Bureaux of Agriculture and institutions such as the Medical Research Council, which take a direct part in assisting research in the African colonies; the latter also benefit from the regular grants of £6,000 to the Amani Agricultural Research Station, and £16,000 to the Imperial College of Tropical Agriculture, Trinidad. They share in the advantages of the marketing research conducted by the Colonial Empire Marketing Board with an annual grant of £40,000. From time to time special grants-in-aid are also made for purposes of imperial as well as local concern. Thus a grant of £70,000 to Kenya was approved in 1938 mainly to provide assistance for refugees from the Abyssinian war.

In the early years help to individual territories largely took the form of grants-in-aid. Since the War the practice of giving loans rather than grants was extended, in order that any territory whose financial position improved might be under the obligation to pay off some part of the deficits involved in its past administration. There has more recently been a tendency to revert to the practice of making grants-in-aid. The accumulation beyond a certain point of debts which have no relation to the financial capacities of the territory, and which from lack of means to meet their service were necessarily interest free, was rightly considered to diminish the financial responsibility of the administrations. The treatment of the accumulated indebtedness of the past has also come under consideration. These changes more particularly concern Somaliland, Nyasaland, Bechuanaland, and Swaziland. In the case of Bechuanaland and Swaziland loans-in-aid amounting to £57,000 and £44,500 respectively in 1937 and £50,000 and £53,500 in 1938 have been approved. But it has been indicated that the review of

¹ See below, pp. 1617 ff.

unrepaid advances mentioned above may involve a change from loan to grant.

The financial position of Nyasaland has lately been reviewed in the light of the complications arising from the financing of the railways and the Zambesi Bridge. For some time the territory had been assisted by loans-in-aid, but since 1936 it has received grants-in-aid to meet the interest and sinking-fund payments on its guaranteed loans. The British estimates for 1938 make provision for a grant-in-aid of £150,000 for this purpose, and for a loan of £56,000 to meet its railway guarantee.

The loans-in-aid made in the past in some cases carry interest. Those of Nyasaland, for example, carry a nominal interest of 5 per cent. in addition to a sinking fund. But owing to the financial state of the territory, the sinking fund has been from time to time suspended, and the interest payments have accumulated instead. The loans-in-aid given to Swaziland and Bechuanaland are repayable on terms prescribed by the British Treasury. In effect neither interest nor sinking fund is met on the greater part of the borrowings. In addition Tanganyika has a debt to the Exchequer of £1,075,508, borrowed in the years immediately following 1921. On this no interest has hitherto been paid, but the future terms of the loan are at present under discussion. Finally there is the debt of £5,502,592 for the original construction of the Kenya-Uganda Railway, also now under discussion.¹

The total assistance approved from the Colonial Development Fund during the first nine years of its existence has been £7,284,682. Of this, individual African territories have received £4,040,201, of which £2,401,575 was given in grants and £1,638,626 in loans. Africa thus received about 56 per cent. of all grants and about 54 per cent. of all loans. In addition grants of £6,500 have been made for general African purposes, and grants amounting to £108,765 have been made for general colonial purposes, mainly for agricultural, veterinary, and forestry scholarships, and for assistance to central research stations; it may be taken that approximately £60,000 of services has been derived by Africa from this source. Thus the average assistance to African territories from the Colonial Development Fund in grants, as distinct

¹ See Chap. XXIII, p. 1582.

from loans, during these nine years has been approximately £275,000 a year.

From these figures a very rough estimate may be made of the current assistance given to the British African dependencies. It must be emphasized, first that the resulting figures can be only an approximation, sufficiently accurate to indicate the order of magnitude, but not to be regarded as unassailable in detail, secondly that the calculation excludes all the costs of defence and all contingent liabilities in respect of guaranteed loans. If the payments to Somaliland, Bechuanaland, Swaziland, and Nyasaland are treated as grants rather than loans their total is £277,000. The total grant to Amani, and a share of the grants to Trinidad and to the Colonial Empire Marketing Board would amount to approximately £37,000. If interest were charged at 4 per cent. on about £1,700,000 of outstanding Exchequer loans (excluding that for the Kenya-Uganda Railway) it would amount to £68,000. Including the average annual grant from the Colonial Development Fund, these make a total of £657,000.

The character of the contributions made by African colonies to imperial institutions, or to similar objects, may be illustrated by the case of Tanganyika. In 1936 there was a total expenditure upon subventions, both imperial and local, of £24,608. Of this £6,000 was the contribution to the Amani Research Station, £3,069 a grant to the Sisal Tax Board, £1,300 Tanganyika's share of the East African meteorological service, £769 that of the East African Trade and Information Office, and £1,139 that of the Governors' Conference secretariat. £7,000 was given in subsidy to the air mail service. In addition to these larger contributions there were a number of small contributions of less than £1,000 each to various research institutions and educational schemes. Thus there were grants of £709 to the Inter-Territorial Language Committee, of £512 to the Agricultural Scholarship Scheme, of £500 to the Bantu Kinema Experiment and the Imperial Institute of Entomology, and of £250 to the Imperial Mycological Institute, the Imperial Forestry Institute, the Imperial College of Tropical Agriculture, Trinidad, and the Colonial Agricultural Service Fund.

In approaching the similar questions which arise in regard to

the French and Belgian colonies there is one initial difficulty. The British system of compiling public accounts, and the tradition which constrains administrations to convey the fullest amount of information to the public on financial as well as other matters, render the examination of the British colonial budgets far easier than that of other colonies.¹ The examination of the finances of the French colonies is made more difficult on account of the inter-relations of the metropolitan and colonial budgets, and in the case of French West Africa in particular by the existence of a federation of territories, each of which possesses also a local budget. Certain branches of expenditure, which are more particularly concerned with imperial welfare and policy, are centralized in the metropolitan budget of France. A second group of expenditures are financed from the federal budget of French West Africa. A third group are financed from the local budget of any one of the constituent territories in the federation, for instance Senegal or the French Sudan. The estimated expenditure from the metropolitan budget upon all French colonies, including the cost of central administration, was in 1937 approximately 780,000,000 francs, of which military expenditure accounted for about 605,000,000 francs. Towards this the colonies were estimated to make contributions amounting in total to about 54,000,000 francs, mainly for military services. The largest contribution was that of Indo-China; French West Africa was estimated to contribute about 7,700,000 francs, and French Equatorial Africa about 640,000 francs. From the metropolitan budget there are temporary grants made to various local budgets and railway administrations. Thus the estimates for 1937 included a figure of 76,000,000 francs to cover extraordinary grants and repayable advances to the general budget of French Equatorial Africa.

The federal receipts in French West Africa, apart from loans and subventions, were estimated in 1937 at about 184,000,000 francs. The main, and in fact the only large source of ordinary revenue was import and export duties. Of the ordinary expenditure about 74,000,000 francs was required for debt services, about

¹ One effect of the mandatory system (see Chap. VI, p. 216) is that the French mandated territories publish a much clearer statement of accounts than the neighbouring colonies.

11,000,000 francs for contributions to the metropolitan revenues and to certain other services jointly performed by the African colonies, and 16,000,000 francs for subventions to the local budgets of the federated territories. The remainder of the budget was required to provide for the central administration itself, as well as for central expenditure upon economic and social development, both initial and recurring. In addition to the general federal budget there are in French West Africa three supplementary budgets of the federation, one for the railways, one for the administrative district of Dakar and one for the port. The railways, which during some of the depression years had been working at a deficit, were estimated in 1937 to cover their costs. A separate renewals account, deriving its income in part from profits, in part from grants from the general budget, showed a balance of 154,000,000 francs.

The budgets of the colonies forming the federation bear the main cost of local administrative personnel and equipment, as well as of purely local social services and public works. Thus the local budget of Senegal had estimated receipts in 1937 of some 102,000,000 francs; of the total expenditure, about 21,000,000 francs was required for salaries of the administrative and financial services; about 27,000,000 francs was available for expenditure on state-owned industrial enterprises, and for economic and social development. The total of the estimated ordinary expenditure for 1937 from all local budgets in French West Africa was approximately 380,000,000 francs; the extraordinary expenditure was estimated to amount to a further 28,000,000 francs.

The financial position of all French colonies formed a matter of concern to the metropolitan government during the years of depression following 1929. Under the administration of M. Laval, drastic deflation of colonial budgets was undertaken, whereby annual expenditure was to be reduced in total from 3,642,000,000 francs in 1930 to 2,476,000,000 francs in 1934. The ordinary budgets of the West African group of territories were to suffer a reduction from 797,000,000 francs to 575,000,000 francs. The bulk of these economies were in fact achieved, and expenditure in 1934 was reduced to 603,000,000 francs; the deficit, which in 1931 had been as much as 86,000,000 francs, had by 1933 been turned

into a small surplus, which by 1935 had been increased to 60,000,000 francs. The budgets of 1936 and 1937 have thus shown an increase of expenditure, which is again not greatly below the level of 1930.

In addition to the budget of ordinary receipts and expenditure, there is a federal loan budget for French West Africa, from which are financed the major capital developments of the federation. These include the Niger irrigation schemes,¹ extensions of the railway and road systems, harbour works, river and coastal navigation improvements, as well as capital expenditure upon health and education services. An act of 1931, as subsequently amended in 1934 and 1936, authorized capital expenditure which will amount in total to 1,837,000,000 francs. Of this 628,000,000 francs is for railways, 300,000,000 francs for Niger irrigation, and 227,000,000 francs for industrial and agricultural development. The total expenditure from the loan account to the end of 1937 was estimated to be 781,000,000 francs; that on the Niger irrigation was expected to amount to 159,000,000 francs, on railways to 226,000,000 francs, and on ports and rivers to 227,000,000 francs. The expenditure on industrial and agricultural development had not exceeded 43,000,000 francs, but since it includes provision for improvements in connexion with the Niger schemes, it is doubtless only temporarily low. The service of the loans formed a heavy charge in the depression years, but is now only 19 per cent. of the total expenditure. The loans are at a nominal rate of interest of 5½ per cent., and when allowance is made for the terms of issue and repayment, and for amortization, the effective rate becomes approximately 6·21 per cent. Time alone can show whether African developments can support so high a rate;² the returns realized by the Niger irrigation scheme will, in particular, have an important bearing on the finances of the federation.

The financial position of French Equatorial Africa has always been more difficult. Unlike French West Africa, it is since 1934 no longer a federation, and there is now a single local budget, with an additional special budget for the Congo Océan-Pointe Noire Railway.³ Despite every attempt to achieve economy, a balance

¹ See Chap. XV, p. 1049.

² The average rate of interest on the public debt of the Union was 3·96 per cent. in 1935; the average rate for the British African colonies was 4·72 per cent. See S. H. Frankel, *op. cit.*, chap. v, p. 178.

³ See Chap. XXIII, p. 1589.

was only obtained in the estimates of 1937 through a subvention of 79,000,000 francs, almost equal to the entire debt charges of the territory. Ordinary receipts, including the subvention, were estimated to amount to 196,000,000 francs. The railway receipts were similarly estimated to cover only the bare costs of operation, making no contribution to interest charges or a renewals fund. Of a total ordinary expenditure, including debt service, of 198,000,000 francs, about 48,000,000 francs represented the cost of the administrative and financial services, about 12,000,000 francs was provided for public works, and 19,000,000 francs for social services, chiefly medical and educational. The main sources of local income are the capitation tax, yielding about 39,000,000 francs, import and export duties, yielding 48,000,000 francs, and forests, yielding about 5,000,000 francs.

As in other French territories, there is a separate loan budget. The original schemes for capital development have been curtailed in view of doubts as to the wisdom of increasing the debts of the territory. The schemes approved for loan expenditure involve a capital cost of 1,513,000,000 francs, of which 1,170,000,000 francs was for the Pointe Noire Railway, and 177,000,000 francs for the harbour works. It was expected that the entire work would be completed and the loan expenditure exhausted before the end of 1937. The nominal and effective rates of interest are the same as those for French West Africa. It will be seen that the service of the loans is estimated at just over 80,000,000 francs, or 40 per cent. of the ordinary expenditure.

The financial systems of the other French possessions and of the two French mandates in the Cameroons and Togoland follow the general lines that have been indicated above. Of the ordinary revenues of the mandated territory of the Cameroons, amounting in 1935 to approximately 63,000,000 francs, 28,000,000 francs was from personal taxes (25,000,000 francs of this coming from the native tax), and 22,000,000 francs from customs duties. The amounts expended from loan funds are relatively small; the authorized loan was 57,000,000 francs, of which 44,100,000 had been issued up to 1937. The service of the loan amounts to 5 per cent. of the annual expenditure. Of the ordinary revenue of the Togoland mandated territory, totalling 26,000,000 francs, about

TABLE XIV
French African Colonies: Analysis of Expenditure (Estimates for 1937)¹

	French West Africa ²		Equatorial Africa ³		Togo ³		Cameroons ³	
	000,000 fr.	per cent.	000,000 fr.	per cent.	000,000 fr.	per cent.	000,000 fr.	per cent.
Services d'administration et gouvernement général ⁴	129.4	22	39.6	20	16.4	21	19.1	34
Services financiers ⁵	44.5	8	7.9	4	1.8	5	3.6	6
Intérêts et amortissements des emprunts	76.0	13	80.2	40	5.6	19	2.8	5
Contributions aux dépenses de l'État	11.2	2	0.7	1	—	—	—	—
Dépenses des exploitations industrielles	96.3	17	14.1	7	2.8	9	10.4	18
Travaux publics	41.6	7	11.6	6	1.7	5	—	6
Dépenses d'intérêt social et économique	93.1	16	22.3	11	7.5	24	14.6	25
Diverses	85.0	15	21.1	11	5.2	17	7.3	12
Total	577.1	100	197.5	100	31.1	100	57.8	100

¹ Excepting the Cameroons, for which the figures are for actual expenditure, 1935.

² The analysis for French West Africa is of the total of both the general budget of the federation, and the local budgets of the individual territories. The budgets of the railways and of the Port of Dakar are omitted. Subventions amounting to 16,100,000 francs from the general to the local budgets are deducted. The 'budget spécial des grands travaux, etc., sur fonds d'emprunt' is not included. From that budget the following additional expenditure was estimated to be made during the year: (1) grands travaux, 131,000,000 fr., (2) dépenses sanitaires, 17,000,000 fr., (3) diverses, 6,000,000 fr.

³ Excluding the railway budget and the 'budget spécial sur fonds d'emprunt'.

⁴ This includes expenditure on the central judiciary, inspectorates of public works, health, and education, &c.

⁵ This expenditure is mainly for the personnel of the financial administrations.

⁶ The public works are being financed from the loan budget.

5,000,000 francs was received from personal taxes, about 9,000,000 from customs, and about 2,000,000 from a turn-over tax. As compared with the Cameroons the loan charge is relatively heavy, 73,000,000 francs having been borrowed, and the debt charges for 1934-5 amounting to 16.6 per cent.¹ of the annual expenditure.

An analysis of the estimated expenditure of the French African colonies is given in Table XIV (p. 1453) in a form sufficiently comparable to that for the British territories to be of interest.

The dominating factor in the budget of the Belgian Congo is the heavy load of debt charges. Of a total expenditure of 689,000,000 francs in 1934 as much as 316,000,000 francs was required for the service of the public debt. It was pointed out by the Governor-General, M. Ryckmans,² that the debt charges upon this territory, with a population of less than 10,000,000, were considerably greater than those of Nigeria with a population double the size. The character of the public debt, however, differs in one respect from that of the British territories; a considerable part represents the government investment in mining and other development companies, or advances to assist agricultural development.³ Thus, in the year mentioned above (1934), the colony derived some 46,000,000 francs from its share-holdings in companies and from interest on loans. By the end of 1936 the public debt of the Congo amounted in total to approximately 6,654,000,000 francs. In recent years the colony has found it difficult to balance its budget without assistance. In 1934 the total expenditure of about 689,000,000 francs was met only to the extent of 357,000,000 francs from ordinary sources; a subvention of 165,000,000 francs received from the metropolitan government still left a deficit of a further 167,000,000 francs. The grant of subventions commenced in the previous year, 1933, and was made partly in recognition of the substantial holding of the Belgian Government in the mining and other development companies of the Congo colony.⁴

Since 1934 the situation has improved and the yield of taxation

¹ *The Colonial Problem*, Royal Institute of International Affairs, 1937, p. 339.

² See *Annuaire de documentation coloniale comparée*, 1936, vol. i, p. 11.

³ From 1909 to 1932 a sum of £765,000 was advanced out of loan funds for agricultural development. See S. H. Frankel, *op. cit.*, p. 58, note (1).

⁴ For an analysis of the relations of the government with these companies see S. H. Frankel, *op. cit.*, chap. v, pp. 289 ff.

has increased. The devaluation of the currency in March 1935 brought about a new relation of internal to external prices, and a rapid increase of prosperity to the territory, reflected in rising prices for all raw materials sold in world markets. To allow the budget to benefit by some part of this gain, export duties, mostly of 3 per cent. *ad valorem*, were imposed upon various vegetable and mineral exports; at the same time import duties were reduced in order to prevent the increased costs of imported goods from unduly raising prices and depressing standards of living. Apart from copper, sales of which were limited by international agreement, almost every export was substantially increased. The subvention of 165,000,000 francs was, however, continued for 1935; it was reduced to 155,000,000 francs in 1936. The estimated receipts for 1938 have risen to 717,000,000 francs, and with an estimated expenditure of 767,000,000 francs, a subvention of 50,000,000 francs will, it is hoped, serve to balance the budget. It must, of course, be recognized that in the case of the Congo a deficit is due not merely to uncovered expenditure on the ordinary services of the administration, but reflects also the fact that it has been necessary for the state to implement its guarantee in regard to the numerous companies, railway, mining, and others, in which it has a financial interest. It would, for instance, appear that up to 1934 it had made itself responsible in the way of guarantees, dividends, and the like for an amount exceeding 2,600,000,000 francs, and the payments under these guarantees amounted in that year to 110,000,000 francs.

Of the ordinary budget receipts of 1935, amounting to 424,000,000 francs, about 124,000,000 francs came from customs duties. The other main sources of revenue, apart from the subsidy and the income from shares and loans, were the native tax, yielding 83,000,000 francs, and the tax on company profits and professional incomes, yielding 53,000,000 francs.

The expenditures of the Belgian Congo and of the mandated territory of Ruanda-Urundi are analysed under broad headings in the table on page 1456.

The Portuguese territories do not differ greatly from others in their use of the different forms of taxation open to African territories. In Angola it was expected that 48,000,000 of the estimated

revenue of 184,000,000 angolares in 1937 would be received from import and export duties and other indirect taxation, about 39,000,000 from the native tax, and 15,000,000 from state enterprises. In Moçambique, of about \$241,000,000 of ordinary revenue, about \$90,000,000 was the estimated proceeds of the native tax, about \$56,000,000 that of customs and other indirect

TABLE XV
Belgian Territories: Analysis of Actual Expenditure

	<i>Congo belge</i> (1935)		<i>Ruanda-Urundi</i> (1936)	
	ooo,000 fr.	per cent.	ooo,000 fr.	per cent.
Dette publique	298·8	43	5·4	17
Dépenses d'ordre économique— agriculture, travaux publics, régie	116·9	17	8·7	28
Services administratifs, judiciaire, et force publique	163·6	24	9·1	29
Pensions	25·7	4	1·0	3
Services sociaux—enseignement, culture, hygiène	80·5	12	7·1	23
Total	685·5	100	31·3	100

taxation, and about \$25,000,000 receipts on account of emigrant native workers. Both the government area and the Moçambique Company area draw most of their receipts from their transit traffic; the imports for local consumption and the domestic exports of the territory are small compared with the transit trade. Both the western and eastern colonies differ, however, from other territories in that public debt charges form in neither case an appreciable element in expenditure. In Angola they amount to about 9 per cent. of expenditure, and in Moçambique to less than $\frac{1}{4}$ per cent., even when capital expenditure is excluded.

Attempts have been made in some territories to assess the respective contributions to revenue and the benefits from expenditure of the different racial communities. Such an analysis is surrounded by pitfalls. The ultimate incidence of taxation, and in particular of indirect taxation, can seldom be deduced from the forms in which it is imposed. Nor can the benefits be assessed by tracing the identity of the first recipient. A subsidy to European

farmers, for example, may exert part of its effects in making possible the maintenance of a higher level of native employment and of native wages, and a greater facility for the payment of native taxation, than would have existed without it. As has been shown, the legislation of the Union embodies the principle that expenditure on native services should be met from native taxation.¹ The task of assessing the contributions of natives and the benefits received by them formed one of the terms of reference of the South African Native Economic Commission (1930-2). The commission realized that any such investigation involved so many arbitrary and contentious hypotheses that no satisfactory result could be attained. While refusing to commit themselves to any definite conclusions, they suggested that in 1929-30 the natives' contribution to revenues, amounting to something over £3,000,000, fell short of their share of expenditure by about £1,000,000. But, as the Commission remarked, 'it is not usual . . . to consider taxation and public expenditure from the point of view of any one class of persons; the expenditure which the State considers necessary is regarded as a charge against the whole community, and it is the task of the government to distribute this equitably among the various classes of persons which constitute the State'. The total expenditure chargeable against natives was estimated for 1929-30 at £4,184,700. The fact that only some £1,084,700 represented the expenditure on purely native services, and that the remainder was the calculated native share of the costs of general administration, will show how wide is the range of assumption which any such calculation must involve. It is of interest to note that the expenditure per head on the purely native services was 2s. 11d., of which 1s. 10d. per head was spent on general native education.

A somewhat similar investigation formed a part of the inquiry made by Lord Moyne in 1932 into the finances of Kenya. After encountering difficulties similar to those of the Native Economic Commission, Lord Moyne separated contributions and services into those which were, and were not, divisible upon a community basis. He found that the European community contributed about £665,781, and received in purely European services about £171,247, the Asiatic community contributed £385,658 and

¹ See Chap. X, p. 554. See also Chap. XVIII, p. 1213.

received £46,080,¹ and natives contributed £791,100 and received £331,956. Thus their respective contributions to the general and indivisible body of administrative expenditure might be viewed as £494,534, £339,578, and £459,144. How far, in the light of their relative numbers, this was an equitable division, he found no precise means to determine.² But he formed the opinion that in the development of the undivided services in Kenya, the prevailing bias (as to the merits of which he expressed no conclusions) had been toward the convenience of a civilization in which the native so far shares little of the direct advantages. The native could not in his present circumstances fairly be expected to make heavier contributions, and if further revenue had to be raised it ought to be from the non-native.³

In other territories no precisely similar analysis is available, nor would it, indeed, have any great significance in regard to territories, such as those on the West Coast of Africa, where the resident European population is comparatively small, or is represented mainly in the cadres of the administration. But it is of interest to note the extent to which different territories are dependent on forms of taxation which fall predominantly upon one community rather than another. The taxation which first calls for consideration is the direct native tax, the character of which was described in Chapter X. In some of the more purely native territories, such as Basutoland, Uganda, Tanganyika or Nyasaland, where direct native taxes⁴ contributed in 1935 a proportion of 48·0, 37·9, 34·5, and 32·1 per cent. respectively of the total revenue, they have formed an important source of income. In the territories with a larger European element, Kenya, Northern Rhodesia, and Southern Rhodesia, where they provided 25·0, 17·1, and 14·4 per cent. respectively, their contribution was less important, but was nevertheless substantial. The British West African territories have relied largely upon other forms of taxation; the direct native tax does not exist in the Gold Coast, and yielded only 11·8 per cent. of total revenue in Sierra Leone and 14·8 per cent. in Nigeria, ex-

¹ See Chap. VIII, p. 339 for Lord Moyne's figures regarding the contribution of the Asiatic community.

² At the time there were 17,285 Europeans; 56,903 Asiatics; and 2,950,000 natives.

³ *Report on Certain Questions in Kenya*, Cmd. 4093, 1932, p. 27.

⁴ The figure used in this calculation includes all classes of direct native tax.

cluding in the last-named the sums going to native administrations. The British Cameroons came nearer to the level of the East African territories, deriving 29.1 per cent. of its revenue from native tax. In non-British territories the contribution is similar. In 1933 in the French Cameroons it was 50 per cent., in French West Africa 28.7 per cent., in the Belgian Congo 25 per cent., and in Ruanda-Urundi 35.8 per cent.

The yield of non-native direct taxation is insignificant except in the Union, where the taxation of European incomes has naturally formed an important source of revenue, yielding in 1935 as much as 32.6 per cent. of the whole, and in the Rhodesias, where the taxation of mining companies contributes substantially to revenue.¹ The contribution of all items of direct taxation of non-natives was 21.1 per cent. of the whole in Northern Rhodesia and 20.8 per cent. in Southern Rhodesia. In no other territory, apart from Swaziland, where it contributed 6.3 per cent., did non-native direct taxation yield more than 6 per cent. of the total revenue. In Kenya it was 5.9 per cent., and in Nyasaland 4.8 per cent., including in each case the levy on official salaries; in Tanganyika it was 4.7 per cent., and in the Belgian Congo in 1934 it was 5.7 per cent., excluding the *impôts sur les revenus professionnels*, which with *revenus repartis par les sociétés par action* contributed 11.8 per cent. of current revenue.

The main dependence in most territories has been upon customs and excise duties. In British West Africa they have been the predominant source of revenue. In the Gold Coast in 1935 they contributed 79.4 per cent. of the whole, of which 17.6 per cent. came from export duties, mainly upon cocoa, gold, and diamonds. In Nigeria they contributed 54.3 per cent., and in Sierra Leone 66.9 per cent. In the richer, more mineralized, or more settled territories, the part played by customs and excise revenue has been somewhat less. In Northern Rhodesia it provided 38.7 per cent., in Southern Rhodesia 31.3 per cent., and in the Union 33.6 per cent. of total revenue, excluding as before that of the self-balancing departments.

Reliance on customs duties as a source of revenue normally produces the same effect as a régime of protection. Apart, how-

¹ See above, p. 1437.

ever, from the Union, protection for local industries forms no part of the economic policy of the governments in Africa, and the merits of the customs system—apart from the production of revenue—must be sought in other directions. The forms of native taxation are, in almost every case, insufficiently graduated as between richer and poorer individuals and areas, and need to be supplemented by a scheme of taxes which will fall upon those possessing exceptional capacity to pay;¹ the purchase of imports is one important evidence of such capacity. In the case of the European agricultural community there is a similar advantage. To measure agricultural profit in the face of changing prices, and of the capital improvements which form a large part of the activity of settlers in a new country, is a task which would require both more willing collaboration than the taxpayer will ordinarily concede, and a staff of officials of capacity and experience, which few such territories can afford. Somewhat similar difficulties in computing profits arise in the case of the Asiatic trading communities, and the possibilities of evasion make difficult any great dependence upon direct taxation. Customs duties suffer, however, from one marked drawback. In most African territories imports of consumption goods reflect the surplus at any moment over and above the necessary expenditure upon foodstuffs, which are provided mainly from local sources. This surplus fluctuates violently as between boom and depression. Moreover, most of those territories which have seen industrial development have derived a part of their customs revenue from the taxation of imports of constructional goods, both in the form of machinery and in that of the raw materials or tools for building. Thus the customs revenue has oscillated according to the rate of foreign investment in the territory. During a period of construction, owing to the larger numbers of Europeans present for that purpose, there will also be a greater importation of consumption goods. In Northern Rhodesia, for example, during the period of construction of the copper mines in 1931-2, the yield of customs and excise was £342,017. In 1932-3 it had fallen to £177,671.

It will be apparent that a period of active foreign investment may thus delude a government into incurring loans, or permitting

¹ See Chap. X, pp. 594 ff.

a growth of expenditure, which its revenues cannot support when the period of capital investment is completed. This danger is the greater for a further reason. If foreign loans are employed, as they have been in some cases, for the erection of a new capital, and for public buildings or schools which, however desirable otherwise, do not contribute directly to the expansion of productivity as regards exportable goods, the payment of interest will create its own problem. It must involve a net addition to the export surplus of the territory, derived either from an increase of exports or a reduction of imports. The necessary increase of taxation will impose an immediate curtailment of individual expenditure upon imports. Any repercussions upon the price level and the volume of exports will only slowly come into effect. Thus, in the early stages at least, some decline of the yield of customs is almost inevitable.

Apart from the three sources of revenue considered, native and non-native direct taxes, and customs and excise, most territories derive a substantial income from licences of one kind or another, from royalties, and other miscellaneous sources. In Kenya 'licences and other taxes' provide about 17 per cent., and revenue from government property and royalties about 4 per cent. Mining revenue is important only in Southern Rhodesia and the Union. In the former, the colony now owns the royalties and in 1935 derived 14.1 per cent. of its revenue from royalties, the gold premium tax, and mining fees.¹ It has, of course, to make interest payments on account of the purchase price, but the transaction has now proved to be remunerative to the colony. In the Union the income tax, excess profits duty, and other revenue derived from the mines, have produced in recent years almost a third of the total revenue. Since the British South Africa Company own the mineral rights in Northern Rhodesia, the direct mining revenue is limited to the small receipts from licences.² But of a total assessment for income tax in 1936-7 of £205,530, as much as £191,828 was derived from companies the majority of which were concerned with mining. Nigeria received £188,242 from mining revenue in 1935. On the other hand, Tanganyika obtained only £42,830, Kenya £81,719, and the Gold Coast £97,729. It is not easy to estimate

¹ See above, p. 1436.

² See above, p. 1437.

accurately the proportion of the revenues of the Belgian Congo which is derived from mines. The government's share-holding in mining companies is, directly and indirectly, considerable,¹ and it would appear to have derived during recent years from a quarter to a third of its revenue from the mines, irrespective of the further taxation of incomes earned by mining.

The question whether mining enterprises have contributed as much as they might to the revenues from which further African development can be financed, is not easy to answer.² The fear of overtaxing struggling enterprises may reasonably restrict the imposition of duties upon imports of necessary machinery, or even of export duties upon the finished product. But if adequate provision is permitted for depreciation, it need not equally restrict the taxation of profits. It is true that the question has to be approached with some caution. Taxation sufficient to discourage further enterprise might check the inflow of capital, and therefore at certain times of customs duties, and might deprive the railways of the high-rate traffic which they urgently need. But a diminished reliance upon the taxation of capital imports, and an increased taxation of actually realized profits, might even stimulate such investment. For the rest, the natural resources of Africa are capable of profitable development just so far as relatively low-paid African labour is available to exploit them. It seems reasonable to hold that, subject to the need for avoiding the chance of discouragement to the industry, the largest possible share of profits from that exploitation ought to be made available to improve the welfare of the African population.

The relative merits of alternative means of increasing the yield of taxation have been widely discussed. For Kenya alone, they have been considered on no less than three occasions in recent years.³ It is evident that there are few areas in which it is easy to increase native taxation; all the indications appear to be in favour of effecting further graduation and adjustment rather than of increasing the general incidence. It is doubtful if anything is to be gained by substantially increasing the pitch of customs duties; to

¹ See above, p. 1455. ² For systems of taxation, see Chap. XXII, p. 1531.

³ By Lord Moyne in *Report*, op. cit., Cmd. 4093, 1932, pp. 13-16; G. Walsh and H. R. Montgomery, *Report on Native Taxation*, 1936; and Sir Alan Pim in *Report*, op. cit., Colonial 116, 1936, pp. 39-44, 231-5.

do so might retard the growth of the native desire for imported goods, the use of which has shown itself to be very susceptible to any change in price. Nor is it reasonable to expect any considerable increase in the near future from income-tax receipts. At present, the income tax must be regarded as a form of taxation suited only to the European and Asiatic communities and to the small number of natives who have adopted European commercial methods.

In South and East Africa all British territories except Tanganyika and Uganda have now imposed an income tax. There is no doubt that this tax is a more scientific form of levy than the graduated poll tax, and it also, unlike the poll tax, permits of the taxation of company profits; but the financial gain from making the change in those two territories is not likely to be important. While the rates of income tax in African territories are in general low as compared with those of European countries, it is important to consider the burden of taxation as a whole, rather than that of this one isolated tax. In Kenya, Lord Moyne's estimates of contributions by the different communities indicate that the taxation in 1931 was equal to about £41 6s. per head of European population of all ages. If the total of economically independent persons is taken as the criterion, the burden was approximately £64 per head.

It is not easy to compare these figures with those of European or other countries, since nowhere outside Africa is any similar distinction made of the income and the contributions to taxation of a small part of the whole community living on a higher standard than the average. The most superficial observer must be struck by the difference which the existence of a resident European community makes in the general standards of government expenditure. There is hardly a department of state activity in which expenditure is not forced up to higher levels than would be necessary for a territory in which the scale of requirements is judged by African instead of European standards.¹ There is consequently every justification for taxing Europeans up to the full limit of their taxable capacity. But though doubtless the rates on certain of the industrial undertakings could be raised, the agricultural section

¹ See *Report*, op. cit., Cmd. 4907, 1935, para. 115.

of the European community offers little scope for the imposition of high rates of income tax. Moreover, in any calculation of the possibilities of increasing the resources of the African dependencies as a whole, it will be seen that income tax must continue to form only a small proportion of the total revenues.

In a continent of great distances and comparatively sparse population, the cost of services such as administration, health, and education, must be high relatively to that of similar services in more closely populated countries. Present standards of technique of native agriculture and production, and the relatively small European populations north of the Zambesi, must imply, on the other hand, a low level of taxable capacity, even when every opportunity to profit by higher taxable capacity is seized. For many years to come the financial limitations upon African development must in consequence be stringent. It has more than once been necessary to make a reference to the experiences of the recent depression period. It is not out of place to recall here that in the British territories, excluding the Union and South West Africa, the total revenues fell from £27,971,000 in 1929 to £22,839,000 in 1932.¹ If during these years the development of the social services was retarded, there was one contingent advantage. In the process of retrenchment the colonial budgets were relieved of a certain amount of unnecessary commitments, and there was a definite stimulus given to the study of means for substituting less expensive agencies in administration; in particular, attention was directed to the possibility of making a larger use of African personnel. It is to be hoped that the expansionist sentiment which led to the large increase in loan commitments from 1925 onwards,² has now given place to a more realistic view of the financial possibilities of the territories. If so, there will also be a general recognition that, unless unexpected mineral discoveries or the like greatly increase the productive capacity of those territories, it is not possible to expect more than a slow and very gradual expansion

¹ The customs revenue, which reached its peak in 1928 with £10,834,000, continued to fall till 1934 when it was £6,854,000 (S. H. Frankel, *op. cit.*, Tables 38 and 39).

² The funded debt of the British territories other than the Union increased from £12,537,000 in 1913 to £63,699,000 in 1925; it had risen (partly on account of the depression) to £95,850,000 in 1932.

in the resources available for the development of the social services.

If African administrations are to be able to attain higher standards in expenditure on social improvements, the African population must pay the price which is necessary to earn them. Any substantial improvement in general taxable capacity will involve a far greater measure of differentiation in the constitution of society, the growth of specialized types of occupation, and the individualization both of effort and of the property which effort earns. There are those who will view with some distress anything which tends to substitute the 'disastrous atomization of western society'¹ for the organic unity which African society still possesses. It may be answered that western society is finding that it is possible to combine a common social purpose and ideals of common social service with an advanced degree of economic individualism. But whatever value is to be attached to this consideration, it is not open to doubt that the African peoples cannot hope to provide themselves with the resources needed for a material development of their social services, without a change in many of the social conceptions which determine the character of their economic life.

¹ J. H. Oldham and B. A. Gibson, *The Remaking of Man in Africa*, p. 53.

CHAPTER XXI

CO-OPERATIVE ORGANIZATION

I. THE USE OF CO-OPERATIVE SOCIETIES

VIEWED as an industry, agriculture has its own special needs in respect both of credit and of marketing facilities,¹ and the rural population presents its own distinctive problems in social development. The small farmer everywhere needs assistance in the purchase of seed and implements and the grading and marketing of his crops, and in backward countries especially, where he is ignorant and transport costs are high, he becomes unduly dependent on the middleman, who is frequently the money-lender as well. Co-operative organizations can so unite producers that they are able to borrow money on their joint liability, and they can secure, through joint purchase of agricultural implements and joint sale of crops, a fairer price from the merchant than the small farmer could obtain in isolation. The success of the movement in Asia and elsewhere has naturally suggested that in Africa also co-operation might solve some of the problems created by the impact of new forces on native life. Some caution is, however, necessary, for conditions are in many ways different; in particular the African peasant has as yet relatively little need for credit, and experience in India gives an emphatic warning against indiscriminate extension of credit facilities. There is, on the other hand, clearly great scope in Africa for the development of co-operative marketing schemes. There are those who take a wider view, and hold that through co-operation a fresh social equilibrium may be established in the African tribe to take the place of the old communal economy which is breaking down. In the words of a prominent supporter of this view, Africans need help 'to grow up socially and economically till they can face the modern world without disaster, and the village can welcome the foreign trader or teacher without fear of dissolution'.² If so, the co-opera-

¹ See Chap. XIII, pp. 909, 916, 963, 982-3.

² C. F. Strickland, 'The Co-operative Movement in Africa', *Journal of the Royal Society of Arts*, vol. lxxxii, 1934, p. 739.

tive movement will not in Africa always aim merely at an immediate economic end, but will include, in addition to societies for credit and agricultural production, others for thrift, promotion of education and hygiene, and 'better living' generally. Since a co-operator is a voluntary member of his society, whereas the tribal organization is by its nature compulsory, he will learn to consider himself a free agent and will realize that individual freedom can be compatible with the well-being of the community, which is an essential element in any social advance. As has been said, co-operation 'may be unable either to preserve or rebuild tribal society in its old form, but it may, however, help Africans to play a more active, self-respecting, and social part in the great economic changes that have to come to them'.¹

But experience is wanting on which to base an estimate of the possibility that these anticipations will be justified. Co-operation as applied to native African conditions has hardly as yet passed the experimental stage. Governments have approached the movement with some hesitation. Some administrations, when establishing organizations of this type for specific economic purposes, have felt that the achievement of these purposes rather than the encouragement of voluntary co-operation must be their primary aim, and have therefore made membership compulsory, thus departing in an important respect from the normal principles of the co-operative movement. Others have organized societies in a co-operative form, but have retained such a degree of control as to restrict the freedom of the members more narrowly than would be usual among a more experienced population. These limitations, however, do not prevent the development of a more advanced system at a later stage, provided they are gradually modified or withdrawn. The course so far taken by co-operative organization will be seen in the following study of the position in the different territories.

II. CO-OPERATIVE ORGANIZATION AMONG EUROPEANS

The organization of farmers for credit, supply, and marketing in those British territories which contain a European settled population—namely, the Union of South Africa, Southern Rhodesia, and Kenya, and, to a smaller extent, Tanganyika—rests principally

¹ M. Perham, *Native Administration in Nigeria*, 1937, pp. 294-5.

on the support of a Land and Agricultural Bank. Though co-operative societies among Europeans had already existed in South Africa for some years, it was not until the creation of the Land Bank in 1912 that progress became rapid. The Bank, instituted originally for granting loans to individuals, extended its operations to the financing of co-operative bodies. The agricultural societies, formed chiefly for the purchase of live-stock and other requirements and for the marketing of produce, numbered 388 in 1934, but for various causes were reduced to 375 with 86,300 members in 1935. They are assisted by a Registrar of Co-operative Societies and a staff of inspectors. There were also 13 consumers' societies in urban areas with 13,500 members, and a large number of small rural credit societies, amounting in 1933 to 1,280, registered under the Agricultural Credits Act of 1926, but these are regarded as unsuccessful and likely to be liquidated.

The agricultural societies and the rural credit societies, both of which are financed by the Land Bank, admit only European members, and it has been laid down that a native society cannot be registered under the Co-operative Societies Act, 1922. Three advances from the Land Bank were for the first time made to Africans in 1935. The Act of 1922 was amended in 1925 to provide that in any area where 75 per cent. of the growers of a stated product together owning 75 per cent. of the crop are members of a co-operative marketing organization, the minority of non-members may be required to sell their own produce of that description through the same co-operative channel. This provision, commonly known as 'compulsory co-operation', was reviewed by the Commission appointed by the Union Government in 1933 to report on co-operation and agricultural credit. The Commission¹ recommended that since the 'compulsory' power led to imprudent attempts to control the price of produce it should be withdrawn. Other recommendations were that the Land Bank should be placed on an independent footing, and should raise its own working capital instead of being financed by the state, and that suitable legislation should be passed to encourage the formation of native co-operative societies.

¹ *Report of the Commission to inquire into Co-operation and Agricultural Credit*, U.G. 16, 1934, chap. iii. .

In Southern Rhodesia two laws govern co-operation: Act 7 of 1909, providing for registration of co-operative societies, and Act 34 of 1925, dealing with co-operative companies. The latter term was used to indicate an institution with limited liability, the liability of societies being then unlimited. A Land Bank was set up in 1924, and eight societies or companies are mentioned in the Bank's report of 1935. The total number on the register is not stated. The British South Africa Company also set up a Land Bank, with offices in Bulawayo, which originally financed farming ventures, though now it is confined to house building.¹ In Northern Rhodesia the government has agreed to pay half the salary of a secretary grader for the Northern Rhodesia Tobacco Co-operative, on condition that his services shall be available to all tobacco planters in the western area, and the Abercorn Co-operative Society has been founded to deal with the marketing of the entire coffee crop. The North Western Rhodesia Farmers' Co-operative Society and the Northern Rhodesia Livestock Society operate in connexion with the Maize Control Board and the Cattle Marketing Board respectively.

The Land Bank of Kenya was established in 1931, when a few co-operative bodies had already been formed by European farmers for supply or sale and had been registered under the Companies Ordinance. The Co-operative Societies Ordinance of 1931 differs from the corresponding statutes of Southern Africa and resembles those of British colonies in Central Africa, in so far that it follows the model of British India rather than that of Great Britain or the Netherlands. Six societies, with 2,000 European members, are now registered under it. The Land Bank makes advances to these societies and to European settlers; some facts showing the scale of its operations are given on page 822 of Chapter XII. The Kenya Farmers' Association is the largest organization of the co-operative type in the colony, and now includes, in its fourteenth year, a membership of 934. It is not clear whether the Association, which was originally incorporated under the Companies Ordinance, has now been brought under the Co-operative Societies Ordinance or not; its trading surpluses are, however, distributed to the members in accordance with their patronage, and its methods are co-opera-

¹ See Chap. XII, pp. 819-20.

tive. The Association operates a wheat pool and a maize pool; its balance-sheet shows a capital of £175,000, of which one-half is owned by the members in the form of paid-up shares and reserves. The Association considered in 1936 a proposal that the Coffee Board, Sisal Board, creameries, and other organizations should be invited to join in the co-operative export of produce, and a single association of primary producers created.

In Tanganyika the Co-operative Ordinance makes the same provision for compulsion as the 1922 Act in South Africa, but no action has been taken on it in view of the fact that there is a large native production to be reckoned with. An attempt was made in 1937 to amend the law so that the section could be applied to any class, tribe, or division, but it was not carried through. No bulk sale of produce through a co-operative organization can be successful unless all the producers in an area are comprised, but a co-operative society consisting of natives and non-natives is not at present a practical proposition. The object could perhaps be achieved by creating separate societies of natives and non-natives which would perform all the bulking, collecting, and payments, with some central organization to arrange the actual sale.

III. CO-OPERATIVE ORGANIZATION AMONG NATIVES IN SOUTHERN AFRICA

Co-operation for Africans in South Africa was first proposed in 1908 by a resolution of the Transkeian Territories General Council, and a draft proclamation, authorizing the formation of credit societies, was submitted to the Union Government in 1911. Following propaganda by the Rev. B. Huss¹ a number of societies were founded in the Transkei area, and proclamations were again submitted in 1926 and in 1930. A request for supervision by the registrar and inspectors of the Union was not granted; instead, a Proclamation, No. 191 of 1934, was issued, providing for the establishment of a Central Committee under the Transkeian General Council to register and supervise the societies. A sum of £200 was voted by the Council to meet the expenses of the Committee and of a supervisor, and 37 societies with a capital of £25,000 derived from shares and deposits have been registered with the

¹ The Rev. Bernard Huss, *Peoples' Banks*, 1928.

Committee. The Commission on Co-operation¹ of 1933 found that certain societies had made mistakes in paying unduly high interest on deposits and charging too high a rate on loans, but that 'having in mind the communal mode of living among tribal natives, it should not be difficult to secure a true spirit of co-operative enterprise among them'. The Commission also pointed out that credit societies would be followed by organizations for co-operative selling and buying, and recommended that the proclamation should extend to these activities; it should also be so elastic as to be applicable to all scheduled native territories in the Union. Proclamation 191 of 1934 is, however, limited to the Transkeian Territories and to credit societies. Native farmers' associations are also found in the Transkei; their object is principally the improvement of agricultural methods, but a small amount of trading has been done. The only important society among urban Africans is the Western Native Township Co-operative Society, a consumers' store formed in 1932 in a native area of Johannesburg. Its first year's trading was successful, and though some losses have ensued, the promoters are declared by the European advisers to be capable of learning by experience and to be building up a sound co-operative society.² Similar ventures are now being encouraged in native locations outside Johannesburg. Such societies remain unregistered.

There is no native co-operation in Basutoland, Bechuanaland, or Swaziland, nor in South-West Africa. Attempts were made to form societies in Basutoland, but they failed; they are now aiming at societies for the classing and sale of wool, a matter of great importance in this area. African growers of tobacco in Swaziland have been required to sell their produce through a European co-operative company in accordance with the law of 'compulsory co-operation', and are represented by an Assistant Commissioner on the board of the company, but are not themselves eligible for membership. No native societies have yet been instituted in Southern Rhodesia.

IV. NATIVE CO-OPERATIVE ORGANIZATIONS IN BRITISH COLONIAL TERRITORIES

In Northern Rhodesia Ordinance 114 of 1914 authorized the organization of co-operative societies; it is of the type usual in the

¹ *Report*, op. cit., U.G. 16, 1934, para. 1025.

² W. G. Ballinger, *Race and Economics in South Africa*, 1934, p. 63.

European communities of Africa, and no native societies appear to exist. Nyasaland has as yet no organization for co-operation. Tanganyika is remarkable for the Native Co-operative Union, which unites the primary societies of the Chaga tribe on Mount Kilimanjaro, supplies them with spraying material and other requirements for their coffee plantations, and markets their crops of *arabica* coffee and certain minor products. The Union received considerable impetus from the opposition by Europeans shown at one time to native coffee growing; in 1937 there were 27 societies affiliated, with roughly 24,000 members. A European manager is employed, and about 1,200 tons of coffee were sold in 1936. There had been a Kilimanjaro Native Planters Association founded in 1922, but this fell into disorder by 1930, and after reorganization in 1931 was registered as the Native Co-operative Union in 1932.

This action was taken under Ordinance 207 of 1932. The Tanganyika Government, after passing the Ordinance and issuing regulations under it adapted to the needs of native co-operative societies, deputed an officer to study the co-operative movement in India and Ceylon. This officer is now available to advise any societies which may be spontaneously formed, but there is as yet no special staff for the encouragement of the movement. The Native Co-operative Union is now part of the government machinery for organizing the marketing of native produce, and under powers granted by the central government, the chiefs have ordered the people to sell their coffee to it. It has assisted the native authorities in enforcing their rules for the cultivation of coffee, the protection of the water supply, and the prevention of soil erosion; the Provincial Commissioner in 1934 declared that the Chaga understood the value of co-operation, and that 'the progress reported in previous years has continued, and the attitude of mind of the mass of the people has materially altered for the better'. Lately, however, there have been some signs of disruption. Throughout 1936 there was growing discontent among the natives, which culminated in rioting in the Moshi District in 1937. The rioters complained that owing to heavy overhead expenses the Union paid lower prices than they could obtain outside. In this connexion it is interesting to notice that the German produce buyers some-

times offer between 10 and 15 per cent. above market prices on condition that the sellers take part repayment in German goods, especially agricultural implements. An attempt to undermine the authority of the chief of Machame may also have been at the back of the riots, making them therefore not purely economic.¹

A marketing society for the sale of coffee has been formed among the Bugufi growers in the Ngara sub-district of Biharamulo in Tanganyika, and in 1936 the Ngoni-Matengo Co-operative Marketing Society was registered; it markets the native tobacco and coffee crops in the Songea area. Native settlers at Chasalawe have set up a credit society with the aid of a loan from the Kwimba Native Development Fund, but though the grant of credit to Africans by private lenders is closely restricted by law, no general need for credit societies is felt, and indebtedness is not heavy. Ghee societies are being started among stock-owning tribes in the Kwimba and Mbulu Districts. In Uganda there is a large coffee co-operative in Bugisho, and a Co-operative Societies Bill has recently passed its first reading.

In Kenya, on the other hand, there are no co-operative institutions among natives, and the Co-operative Ordinance is somewhat better adapted to the needs of Europeans than to those of Africans; the fee for registration of a society in Kenya is 25s. as against 3s. in Tanganyika. It is possible that the steps now being taken to stimulate the production of milk and ghee in the native reserves, and to promote the industry in hides and skins, may lead to the development of co-operative institutions. There is, however, no co-operative staff in Kenya, and Sir Alan Pim has recommended² that an officer be trained for such work even in the early stages of the movement. Credit and stores societies, he considers, should be deferred to a later stage, agricultural improvement and thrift being the first necessities. He takes, however, a wide view of what is required. 'Village life must be improved in all directions, and not only the agricultural but many other departments, including more especially the medical and the educational, are concerned in this all-embracing work.' Unsupervised attempts at co-operation have been proved in Kenya to involve risks, and though

¹ See *Report to the League of Nations on Tanganyika Territory*, 1937, pp. 206-13.

² *Report on the Financial Position and System of Taxation in Kenya*, 1936, pp. 173-5.

co-operative stores may be successfully conducted at a Jeanes training centre,¹ instructions have been issued to African teachers not to open co-operative stores without sanction after return to their schools in less accessible places.

In Nigeria the Agricultural Department encouraged the formation of co-operative societies, at first largely with the object of improving the grade of the cocoa crop, though a wider view developed later. Several societies were started, and in 1935 the Co-operative Societies Ordinance, based partly on Asiatic models, was passed to enable the government to consolidate the existing organizations and to extend the movement beyond the agricultural field. A registrar with special training has been appointed, and proposals for the formation of a Co-operative Department are being considered. The amount of cocoa marketed through the societies in the 1936-7 season was 3,698 tons, and the quality, as in the Gold Coast, is high. The membership is about 6,500, and associations number about 100. Reorganization is proceeding, and thirty societies are now affiliated to the Ibadan Union. Official control has been less close in Nigeria than in the Gold Coast, and though lower efficiency may have resulted, it is possible that a fuller sense of co-operative independence has developed. The societies are primarily for marketing, and have limited liability, but they give credit in small amounts from their own resources. The rate is high, usually about 15 per cent., but as there is little security the societies are taking a considerable risk, for which they have to be covered. This combination of credit and marketing facilities in the same society is unusual, but it is to be found also in the Gold Coast, where conditions are similar. The small cocoa farmer has little need of credit on a large scale, as his equipment is cheap; also as land is seldom held on a negotiable title there is no security to be pledged, beyond the export crop itself, and it is therefore natural that the society marketing that crop should also furnish such credit as is necessary. The mixed farmer of Northern Nigeria, on the other hand, does need loans, which are at present granted by the native administrations. It is now under discussion whether the issue of these loans could advantageously be taken over by co-operative societies. The Nigerian Government is also putting

¹ See Chap. XVIII, p. 1228.

forward proposals for the formation of co-operative societies for the marketing of palm products; their principal object would be the purchase of a palm-oil press for common use. There are also in Nigerian towns and villages a large number of thrift and mutual aid societies which offer an opportunity to the co-operative organizer.

In the Cameroons under British Mandate, 93 cocoa societies in Kumba, affiliated to a union, had 1,568 members in 1936, and sold 456 tons of first-grade cocoa. About 90 tons was also sold by 41 new societies in Mamfe, though these were not truly co-operative. The Kumba societies and union own a lorry and finance the cocoa cultivation of their members; over £3,000 was loaned in 1936. Reorganization is proceeding as in Nigeria, and the villagers are said to appreciate the advantages of joint action.

The Gold Coast Colony has developed co-operative societies for natives on a larger scale than any other British territory in Africa. The Co-operative Societies Ordinance of 1931 was based on Asiatic legislation, and is well suited to the needs of West Africa. The Ordinance did not, however, provide for unions of societies, and it has recently been amended to authorize the formation of such bodies in order to increase the credit facilities available. Some 400 primary societies of cocoa growers in 1936 contained 9,000 members and possessed a capital of £25,000, almost the whole of which has been contributed by the members in the form of shares and reserve funds. A deposit system has also been developed and the total deposits in 1936 amounted to £24,000. The cocoa marketed, about 6,000 tons, is of high quality, and a marked improvement in the standard of produce effected through better processing and grading is the most important benefit conferred by these societies on the growers. Joint marketing committees, which numbered twenty-nine in 1935, undertake the business of bulking and sale on behalf of the societies. Like the Nigerian societies, those of the Gold Coast combine credit and marketing facilities. Advances are given to individuals for cultivation, and overdue payments are few. Recently the societies have begun to issue loans for the relief of farm-mortgage debt, and up to the present these loans and personal and cultivation loans have amounted to £30,000.

The movement has in the Gold Coast remained closely attached

to the Agricultural Department. The societies have from the first been closely supervised by the registrar and a staff of European and African officers. The scarcity of African villagers competent to write the accounts of a credit and marketing institution has necessitated the employment of paid secretaries for groups of societies in certain areas, but classes are now being held in order to educate villagers for this duty wherever possible. Few societies were registered before 1935, as their success was not yet established; the whole position was, however, examined in 1934 by an adviser¹ from the Tropical College of Agriculture, Trinidad, on whose recommendation the control exercised over the sound societies is being relaxed, while unsatisfactory societies are being dissolved. An annual audit of every society is conducted by the official staff. A small number of societies for the cultivation and marketing of cotton, fruit, copra, and rice are in operation with varying success; there are also two thrift and loan societies whose membership is restricted to the staff of the Department of Agriculture. The movement has hitherto been limited to agricultural credit and marketing, and other branches of co-operation have not been developed. Africans in the towns have their own thrift and loan societies on an informal and unregistered footing, and the organization of these societies on regular lines would seem to offer a suitable field of activity for the Co-operative Department. Occasional attacks are at present made on the co-operative movement by educated Africans, who allege that European firms are favoured in the cocoa auctions, though this allegation has been vigorously denied. In 1937-8 a grave setback was sustained by the movement when an agreement between the buying firms was met by a complete boycott on the part of the growers. As was shown in Chapter XIII, in dealing with this incident,² the situation is being investigated by a commission of inquiry.

In Togoland under British Mandate a group of cocoa societies under the control of the Gold Coast registrar has made some progress. Twenty-one primary societies and two joint marketing committees were working in 1935. There is no co-operation in the Gambia, and the first attempt to organize rice-growers in

¹ C. Y. Shephard, *Report on the Economics of Peasant Agriculture in the Gold Coast*, 1936.

² p. 908.

Sierra Leone was made in 1936. A demand for a wider interpretation of the movement than has prevailed in the Gold Coast has been made by urban Africans of Sierra Leone.

V. THE ORGANIZATION IN FRENCH TERRITORIES

The organization of Africans for joint economic action and mutual benefit in the French colonies has mainly taken the form of *sociétés de prévoyance*. These institutions, which were authorized in the older colonies in 1901, are compulsory, a contribution (*cotisation*) being collected from each cultivator with his tax. The older decrees were replaced by a succession of measures of the Central Government of French West Africa, dating from 1919 to 1933. According to these, the objects of the societies are to develop agriculture, animal husbandry, the production, processing, and sale of crops, to give short-term loans to their members for any useful purpose in time of need, and to make advances, of longer term if necessary, for the conduct of agriculture or animal husbandry or for the purchase of equipment. There is one society for each administrative circle, the secretary-treasurer is appointed by official order, and the District Administrator, who is the president, represents the society on its executive side. A council of administration, elected by the members, has an advisory function; similar committees are elected in the sections 'according to local custom'. The council under its official president having drawn up its budget of expenditure for the coming year, the government fixes the amount of contribution required to meet this expenditure, and levies it accordingly. The receipt of deposits is not permitted, but loans may be taken with the approval of government, and the Agricultural Loan Board (*Caisse Centrale de Crédit Agricole*) in each colony is authorized to lend to the societies.

The *sociétés de prévoyance* have attained considerable numbers and handle large funds. In French West Africa there are stated to be such *sociétés* in 101 out of the 118 circles, with 8,500,000 members. Their resources consist of members' contributions, grants of facilities (e.g. seconding of officials) from the colonial governments, and loans from the Agricultural Banks. The *sociétés* of Senegal at the end of 1934 had 1,200,000 members paying an annual contribution of 4,500,000 francs. Those in the

French Sudan had in 1936 a total of 1,005,396 members and a budget of 2,114,033 francs.¹ The *sociétés* in Dahomey are also flourishing. Whereas in French North Africa the *sociétés de prévoyance* aim at the prevention of famine by means of compulsory thrift, those of West Africa were directed by M. Brévié as Governor-General towards a bolder policy. Improved seed is multiplied and distributed to members, loans in cash and kind are made, breeding animals are bought and maintained for their use. Under this policy the *sociétés* have become one of the principal agencies in the recent programme for the extension of native production.² A typical instance is seen in the expansion effected in the groundnut crop in Senegal, where the *sociétés* have been instrumental in building a large number of wells for the improvement of the water supply,³ and undertake the direct marketing of the crops. A standard price is paid to the cultivator on delivery followed by a bonus on the completion of the sale.

The degree in which the opportunities offered by the *sociétés* are utilized by the members no doubt varies from one circle to another, and much may depend on the attitude of local officials; but the figures quoted leave no room for doubt that striking results are achieved. Criticisms have been directed against the new policy by Chambers of Commerce and the press, which make much of embezzlements and shortages revealed in certain Senegal *sociétés* and demand that their activity be limited to the improvement of agriculture and animal husbandry; the motive behind the opposition is perhaps seen in the claim that the attempt to sell the produce of the members directly and without the intervention of local merchants be abandoned. Comment is made on the participation of officials in such trading business. On the other hand, a distinguished officer who was sent out from France to conduct an inquiry on the spot reported substantially in favour of the *sociétés*.

In Togoland⁴ and the Cameroons under French Mandate the *sociétés de prévoyance* show some difference in organization. In Togoland there are now 6 societies, with a budget of 340,000 francs, the *cotisation* varying from $\frac{1}{2}$ to $2\frac{1}{2}$ francs per member.

¹ *Premier Congrès Soudanais*, 1936, vol. ii, p. 135.

² See Chap. XI, p. 633.

³ See Chap. XV, p. 1051.

⁴ *Rapport annuel au conseil de la Société des Nations sur l'administration du Togo, pour l'année 1937*, pp. 66, 194.

The societies have received loans of 130,000 francs from the state, and considerable aid in the form of motors and machinery. Their principal activity lies in the provision of palm-oil crackers for village use, but they have lately made an interesting departure in the construction of co-operative tapioca factories. In the French Cameroons the system does not differ in any material respect from that observed throughout French West Africa; the annual *cotisation* (now raised to 2 francs) is collected from members at the same time as their tax. The president of each society is the administrative head of the district; but, as in French West Africa, the annual budget is discussed at meetings representative of the members. The societies are thus in practice official organizations, like those in other French territories; but the system has the advantage of engaging the interest of those who contribute to them, and they have a wide field of activity. The earliest society, founded at Dschang in 1924, was concerned with the breeding of cattle; later societies undertook the purchase of implements, the planting of coffee and cocoa nurseries, and the joint sale of produce. The societies now maintain some 17 *surveillants agricoles* and a considerable number of *moniteurs de culture* locally trained; the societies at Nyong and Sanaga had between them as many as 150 *moniteurs* in 1935. They buy a considerable amount of agricultural machinery and equipment, such as palm-oil crackers, sprayers, and ovens for cocoa, coffee driers, and the like; they have lately added the improvement of live-stock to their activities. They are financed mainly from their own subscriptions, and are entitled to borrow from the Agricultural Bank, but the figures given in the annual reports of the territory do not discriminate between the different classes of receipts. There were at the end of 1934 forty-four societies; their expenditure in 1935 amounted to 1,579,728 francs, and they had a balance of 487,579 francs. There are in addition five societies of European planters.

An Agricultural Loan Board (*Caisse Centrale*) in each colony of French West Africa, already authorized by a Decree of May 23, 1926, was given wider powers by a Decree of July 10, 1931, and *Caisses* have been established in Dahomey, Guinea, the Ivory Coast, Senegal, and Sudan. A similar bank in the Cameroons was established by a Decree of June 4, 1931, and another in Togoland in

1935. The banks are permitted to lend to *sociétés de prévoyance*, co-operative societies, and individuals. The Permanent Mandates Commission in 1932 was informed that their principal object was 'to help planters', and it would seem from later reports that in the Cameroons at least the loans given by the local *Caisse* were nearly all of this character. Elsewhere there are no figures available showing the extent to which loans are given to the native *sociétés de prévoyance*. In French Equatorial Africa no *sociétés de prévoyance* exist. An Agricultural Bank finances plantation enterprises; interest rates are often exorbitantly high.

Mutuelles scolaires have been encouraged in the West African colonies since 1916, and a government circular of January 28, 1936, reviews their progress. All the pupils of a school are members, the headmaster is the president under the supervision of the *Commandant de Cercle* and the Education Department. Their business is to engage the pupil members in joint work on the land or in a craft, to teach the lesson of mutual aid and the benefits of agriculture. Many are said to be working effectively. The *mutuelle scolaire* of Africa is modelled on the French *mutuelle scolaire*, and resembles in several respects the Young Farmers' Clubs of Great Britain and North America. It differs in insisting on a joint enterprise of the members, whereas the club expects each member to manage his own live-stock or garden plot and to compare notes with his fellows.

VI. THE ORGANIZATION IN BELGIAN AND PORTUGUESE TERRITORIES

In the Belgian Congo a Decree of March 23, 1921, applied the Belgian law on co-operative societies to the Congo territory. Several societies of employees have been approved. The Coquilhatville Co-operative Supply Society admits employees of government, of the *Banque du Congo Belge*, and of religious or philanthropic bodies. The members are for the most part, and perhaps solely, Europeans. There has been a protest by the Chambers of Commerce against loss caused to them by these societies. There are a number of African co-operative organizations, mostly started by government action.

A Law of July 21, 1928, in Moçambique provided for the creation of an agricultural credit fund in that colony.

VII. GENERAL CONCLUSIONS

If co-operation be viewed primarily as an agency of economic improvement, its chief function in Africa appears at present to lie in the formation of marketing societies with limited liability. Credit societies with unlimited liability run some danger of misuse in a primitive community, and, save in part of the Union, a few districts in coastal West Africa, and in some urban centres, there seems little present need for the provision of credit facilities. Indebtedness is mainly confined to these areas, and even there the burden is not as heavy as in India or Ceylon. There is as yet no procedure in African customary law for regulating money contracts or interest-bearing loans, and the absence of individual tenure reduces the possibility of borrowing on the security of the land.

The problems which arise from the development of a system of individual tenures have been discussed elsewhere,¹ and particular reference has been made to the effect which the recognition of individual titles may have on the use of land as a basis of credit. Though, however, credit facilities are not yet required on any large scale at present, there will be some greater need for them in future as agricultural methods improve, especially in mixed farming. But care must be taken not to tempt the African into unnecessary borrowing by the provision of easy loans, and it must also be remembered that the conduct of credit societies imposes a greater strain on the honesty of members than the organization of production and marketing. The joint credit and marketing societies of Nigeria and the Gold Coast would seem to offer adequate means for meeting, at all events for some time to come, all requirements of this nature.

Up to the present there are, as has been shown, relatively few societies which can be described as genuinely co-operative, in the sense that they are voluntary and self-managing, but though the wider advantages which many see in the movement may depend on the growth of independent institutions, there is not yet sufficient material on which to base a forecast of the capacity of the African to conduct voluntary institutions of this class. It can, however, be

¹ See Chap. XII, pp. 842-63, 867-76.

justly said that experience in Nigeria and the Gold Coast shows that natives can appreciate the advantages of voluntary combination for a common purpose. The numerous organizations of an official character, or mainly directed by officials, while not in the full sense co-operative, nevertheless have a value beyond the immediate economic benefits which they secure; they stimulate the interest of their members and demonstrate the value of joint action, thus affording a foundation for the growth of the true co-operative spirit. It must also not be forgotten how essential official supervision is in the early stages. After initial popularity, co-operative movements are apt to suffer a setback, and constant care and encouragement are needed. In some cases a general improvement in prices seems to remove the need for joint marketing; in others a sudden depression will make it difficult for a credit society to recover its outstandings, and its resources are in consequence depleted at the moment when its members have most need of its aid. It is at such times that the middleman or the money-lender finds ways to reassert his control. There is another consideration which must always be present in the minds of those who interest themselves in the promotion of co-operative organization. At present the needs of the small farmer are few, and the co-operative movement will not ultimately endure if it aims merely at giving him more money, for indolence may well triumph. Rather it must encourage saving, and expenditure of the extra money on productive purposes or 'better living'.

There are some who, while acknowledging the advantages which may be expected from the extension of the movement, have hesitated to support it, on the ground that the existence of the co-operative society may be incompatible with the position accorded to native authorities under the system of indirect rule. It is felt that such societies represent groups of persons united by common interests and loyalties not shared by the rest of the community, so that their existence may tend to loosen those tribal bonds on the maintenance of which the evolutionary development of native societies depends. But that consideration cannot be decisive. Any native tribe contains within itself groups which unite for common purposes, and acquire, in consequence, a sense of common interest which may be opposed to the interests of other members of the

tribe; the creation of a new combination to meet new circumstances does not necessarily militate against any existing loyalty. There is, of course, the possibility that, representing as it probably would the more progressive elements of the tribe, the society might become a focus of opposition to traditional authority, and recent experience in Tanganyika shows that there is real risk of conflict; but this danger is reduced if a link is maintained between the native administration and the society; for example, by representation of the native authority on its committee. Such interaction may indeed serve to strengthen the native authority while proving of benefit to the members of the co-operative society.

CHAPTER XXII

MINERALS AND MINES

I. INTRODUCTORY AND HISTORICAL

AFRICA's minerals have had a great influence on the history of the continent. In the remote past it was the search for precious metals which established contact with Asia and Europe; in the present age it is the metals and precious stones more than any other of Africa's products which have been responsible for the introduction of capital and all that this has meant. With few exceptions mining operations have been left to private enterprise; governments have for the most part confined their activities to assisting in the discovery of minerals by the collection and publication of geological information, to regulating the terms under which prospection and production may be carried on, and to supervising conditions of recruiting and employment of labour. The marked differences in the quantity of minerals produced in the various territories may be primarily due to inequalities in the distribution of mineral resources. But the extent of actual production does not necessarily offer a reliable indication of a country's potentialities, for the discovery and exploitation of minerals are largely affected by the degree of general development, particularly of transport facilities, and by the nature of state policy in its various aspects, while not infrequently factors such as premature expansion and unsound finance have materially retarded progress for a considerable period. After a survey of the progress that mining has made in each territory, it will be necessary to discuss the chief of these influences upon the growth of the industry.

The native working of metals in the pre-European period is worthy of mention, not only for its historic interest, but also because the traces of ancient workings have in more than one area afforded a valuable guide to modern prospectors. Long before the Christian era gold deposits in Ethiopia were known to seafaring races trading on the shores of the Indian Ocean, and the 'odour of gold', to

quote the Portuguese historian, João de Barros, attracted Arabs to settle on the south-eastern coast.¹ Glowing accounts of mineral wealth stimulated numerous Portuguese expeditions into the coastlands and interior of Monomotapa and Sofala. They found natives extracting gold by primitive methods and carrying off in quills the few grains which they had won. In Southern Rhodesia the 'ancient workings' are certainly of remote origin, and engineers estimate that the people who made them must have worked out 100,000,000 tons of rock.² As recently as the Matebele invasion of Mashonaland the Amahole worked for gold between the Umsweswe and Umfuli rivers, and the tradition that rich ground was to be found in the old diggings of Southern Rhodesia guided concession hunters; it has been estimated that more than nine-tenths of the mines worked since European occupation are located on the sites of these excavations.³ In Northern Rhodesia also the old mine workings scattered over a wide area guided the first prospecting party sent from Bulawayo in 1899, which pegged the Kansanshi Mine and located many of the large copper deposits in Katanga.

On the West Coast the natives have extracted gold and have worked tin deposits in Northern Nigeria for an unknown period. In the fourteenth and fifteenth centuries the gold for the coinages of Portugal, Spain, and Italy came exclusively from West Africa.⁴ Elizabethan England, when it thought of Africa, spoke, in Ancient Pistol's phrase, of 'golden joys', and the guinea took its name from the coin struck in the seventeenth century by the company of Royal Adventurers of England trading in Africa. As will subsequently be seen, the exploitation by Europeans of the West African gold field was due to the discovery that mines were still being worked by the natives, and the same is true of the tin deposits in Nigeria.

In surveying the development of mining in the modern period and the variety of methods adopted there is one preliminary

¹ S. R. Welch, *Europe's Discovery of South Africa*, 1935, p. 58.

² T. A. Rickard, *Men and Metals*, 1932.

³ A. MacGregor, 'Mines and Mineral Resources of Southern Rhodesia', *Sands, Clays, and Minerals*, vol. ii, no. 4, 1936, p. 48.

⁴ G. Daumain, 'L'or en Afrique occidentale française', *La chronique des mines coloniales*, Sept. 1933, and N. R. Junner, 'Gold in the Gold Coast', *Gold Coast Geological Survey*, Memoir no. 4, 1935.

observation which needs to be made. It will be obvious that development has been determined not merely by local circumstance, but partly also by national characteristics. The British had a large experience of organizing mining enterprise in a great diversity of conditions; prospectors were readily forthcoming wherever it seemed likely that minerals could be found, and the London financial houses and investing public were always interested in their activities. Those conditions did not prevail to the same extent in French, Belgian, or Portuguese territories, where the private prospector has been less in evidence and development has often had to wait on government initiative or support.

The type of development adopted will be apparent from a study of the main facts which at present characterize mineral production in the different territories. In making that survey it will be necessary to mark the distinction between the course taken by the production of gold and that of other metals. As a commodity gold has the advantage that the producer is always sure of a market at a relatively stable price. The only dramatic change in the price of gold which has occurred over a long series of years, that due to the devaluation of a number of currencies, resulted in great advantage to the industry. While the prices of other metals are liable to rapid changes, often due to causes lying outside the metal market itself, the producer of gold is limited in his risks to factors confined to his own particular enterprise. That so large a part of the production of certain areas consists of gold has had a marked influence on the flow of capital to them and on the stability of their economic conditions. It will further be necessary, in examining the facts in different territories, to treat of diamonds separately. The diamond industry is regulated by exceptional conditions. Those who have incurred heavy outlay in development are always at the risk of a chance discovery which may flood the market with cheaply produced stones, or of a change in demand which may mean an expensive accumulation of stocks. They have therefore found it necessary to incur large expenditure in securing a monopoly of supply or in keeping supplies off the market; indeed, the cost of limiting production must in some periods have exceeded that of production itself.

II. MINERAL DEVELOPMENT IN DIFFERENT TERRITORIES¹(a) *South Africa*

Gold. The earliest systematic effort to discover minerals was made by the Dutch East India Company, which introduced miners and assayers from Europe in 1669 and succeeded in tracing the source of the copper ore which natives had brought down to Capetown from Namaqualand in 1681. No steps were, however, taken to develop this, and subsequent prospecting was in South Africa left to private enterprise. Almost from the first days of colonization it was suspected that the Transvaal was rich in minerals, but in spite of the offer of £5,000 for the discovery of a really rich gold occurrence and the attempt to attract smelters for copper and iron from Germany, no development took place until the German geologist, Carl Mauch, reported gold in Mashonaland (Southern Rhodesia) and at Tati, now included in the Bechuanaland Protectorate, where a small stamp-mill was set up as early as 1869.² These discoveries and the finding of diamonds at Hopetown in 1867³ greatly stimulated prospecting, and the next twenty years saw a small gold rush to the alluvial gold fields of Lydenburg, the opening of the Sheba Mine at Barberton, and the beginning of reef-mining on the Witwatersrand in 1884. Henceforward development lay in the hands of large capitalistic enterprise.

Up to the end of 1936 the Union is estimated to have produced minerals valued at £1,969,000,000, of which gold contributed 75.6 per cent., diamonds 16.2 per cent., coal 5.4 per cent., copper 1.5 per cent., and tin, silver, asbestos, and other minerals the remainder. It contributed 41.9 per cent. of the world's production of gold in the period 1903-34. The most important gold-bearing formation is the Witwatersrand. Here the 'reefs' are beds of conglomerate, composed mainly of quartz pebbles bound together by a siliceous cement containing iron pyrites, the whole being called 'banket'. The occurrence of gold in this sedimentary deposit over a wide area presented engineers with

¹ For a fuller discussion of the development of the gold and other mineral industries see S. H. Frankel, *Capital Investment in Africa*, 1938.

² E. A. Walker, *A History of South Africa*, 1928, p. 333; *Science in South Africa*, 1905, p. 311.

³ G. F. Williams, *The Diamond Mines of South Africa*, 1902, vol. i, p. 119.

new conditions, for hitherto most of the world's gold output came from alluvial deposits and quartz veins. While the Rand is the most consistent field yet found, considerable fluctuations in value occur, and in all mines a large proportion of the ore is low-grade. In the early days of the field only the outcrop was worked, but of later years the mining of low-grade as well as rich ore at great depth has been undertaken, with greatly enhanced costs of exploitation. One property is now being worked below 8,000 feet. These disadvantages could not be overcome save by the employment of a competent technical staff, costly equipment, and an expensive programme of exploration and mining. Individuals and small companies had been able to work the outcrops, but within a few years of the 1889 boom it had become clear that the development of gold mining on the Rand, unlike that of the diamond industry, which had flooded South Africa with relatively easily-won wealth, implied the establishment in the interior of the country of a highly organized modern industry requiring large amounts of capital and labour.¹ Over-promotion, over-capitalization, and over-speculation had caused loss of confidence and resulted in periods of deep depression; in 1893, out of 183 gold-mining companies in the Transvaal, 104 had produced no gold.²

The necessity of ensuring stability in finance and efficiency in working led by gradual steps, beginning in 1897, to the adoption of a system under which the assumption of control by powerful financial corporations ensured the 'rationalization' of the industry. Out of 576 gold-mining companies floated on the Rand during 1887-1932, a total of 206 were amalgamated, 313 were wound up, and only 57 remained in existence in 1932. In addition, 160 companies had so short a life that their history cannot be reliably traced. With some minor exceptions the 57 which survived were all controlled by six financial houses or groups. When group control was introduced, the average yield of gold over the whole industry was 11.4 dwt. per ton milled and working costs were 29s. 6d. a ton. By 1929 the cost (in spite of largely increased

¹ S. H. Frankel, *op. cit.*, chap. iii, pp. 75 ff.

² *Group Administration in the Gold Mining Industry of the Witwatersrand*. Address by J. Martin before the Economic Section of the British Association for the Advancement of Science, Johannesburg, 1929.

costs in miners' phthisis compensation, higher wages to European miners, higher customs rates, and greater depth of workings) had been reduced to 19s. 9d. per ton milled, and the industry, notwithstanding the reduction in the average yield of gold to 6.55 dwt. per ton milled, remained on a remunerative basis. In the period 1886-1932 the Rand absorbed some £200,000,000 of capital, produced gold to the value of £1,145,000,000 and paid £255,000,000 in dividends.¹ These results, and the ease with which capital has been obtained for the new expansion on the Rand since South Africa passed off the gold standard, constitute ample proof of the value of the 'group' system. The mean annual yield on the total capital engaged on the Rand has been estimated as only 4.1 per cent. by S. H. Frankel, who attributes this low rate to the large-scale nature of the investment (between 3 and 4 million pounds is required for opening up a new mine to-day) and the long period of development during which no return to capital accrues. The calculation, however, is based upon all capital invested, including the amount sunk in speculations which have failed; the return on the capital invested in existing mining companies is considerably higher, the average for 1935 being 24.5 per cent., or 39.2 per cent. on the issued capital of producing and dividend-paying concerns.

Although over 95 per cent. of the gold won in the Union has come from the Witwatersrand, there are important fields in other Transvaal districts where the first discoveries of the metal in the country were made. The richest are situated in the Eastern Transvaal near Barberton, Lydenburg, and Pilgrim's Rest, and in the north-east at Pietersburg and Letaba. A considerable increase in mining activities has taken place in these areas following the Union's departure from the gold standard. Within the last few years important discoveries have been made in hitherto unexplored areas lying to the south-west of the Witwatersrand, and these bid fair to become large contributors to the gold production of South Africa in the near future.

Base Minerals. As has been shown, gold has an exceptional position in 'marketability'. In regard to other metals South Africa has proved to be less favourably placed, since they possess no advan-

¹ S. H. Frankel, *op. cit.*, chap. iii, p. 89.

tage over those produced in Europe or America under a highly industrialized system. Many of the base metals and minerals can only be processed or utilized overseas and the cost of transport renders exploitation unremunerative. Coal, however, stands in a special category as a source of power. As far back as 1852 the Cape Government had offered a prize for the discovery of coal, but though a deposit was found in 1859 its poor quality led to its being replaced by coal from the Transvaal or Natal. There is evidence that natives had used outcrop coal in Natal in pre-European days, and the early trekkers of 1839 came on its traces; its first commercial use in Natal dates from 1852, but serious development was only possible in 1881 on the arrival of the railway. In the Transvaal also coal mining, which began at Bethal in 1868, was not developed until the gold mines created a demand for cheap fuel and the railways provided the means for its transport. South Africa now possesses an abundant supply of coal, worked by native labour at comparatively low cost, and situated near the mining centres; without the assistance of this cheap supply the continued expansion of the gold and diamond industries would have been impossible. In 1934 the average pithead price was 4s. 11d. per short ton, against 11s. 6d. in the United Kingdom. Output increased from 3,673,000 tons in 1904 to 15,996,376 tons in 1936, and is sufficient not only for the country's own needs, but also for bunkering and export to East Africa, India, Ceylon, and South America. All the coal mines are, however, situated more than 200 miles from the coast, and the cost of railage is a severe handicap in competing with coal from other countries. In the Transvaal a system of 'rationalization' by the Transvaal Coal Owners' Association has had advantages similar to those which resulted from the introduction of the 'group' system in the gold mines on the Rand.¹

Since their discovery in 1922 the manganese deposits of Postmasburg have been found to extend along a strike of over 40 miles. During 1933 and 1934 the content of metallic manganese averaged 49.6 per cent. Production rose from 10,306 short tons during 1929 to 283,779 short tons for 1936. Up to recent years,

¹ L. C. A. Knowles and C. M. Knowles, *Economic Development of the Overseas Empire*, 1936, vol. iii, p. 234.

relatively less attention has been paid to the base minerals, though rich deposits are known to exist, but the Union Government has recognized that its mineral development is one-sided and has begun a systematic study of the resources of the base minerals. In 1933 it appointed a committee to ensure the co-operation of the Mines and Geological Departments, and it has also assisted in the establishment of a mineral research laboratory at the Witwatersrand University. A Small Mines Assistance Committee does important work in financing the development of ore in small mines, and has established a fuel research committee. Another important development is the erection of a large iron and steel plant at Pretoria as a government concern, the Iron and Steel Industrial Corporation, which obtains its iron ore from two mines, one in the Rustenburg District and the other at Pretoria.¹

In South-West Africa, gold, which is of the alluvial type, was discovered in 1924; it is mainly in the lands of small holders, who produced 3,059 standard gold ounces in 1937. Its largest production of other minerals is in copper, exported to the value of £186,601 in 1937, and vanadium, exported to the value of £199,017. There is also some export of tin. The largest copper mine, the Tsumeb, was under water for five years but was dewatered in 1936.

(b) *Bechuanaland Protectorate, Swaziland, Basutoland*

In Bechuanaland gold mining has been carried on in the Tati District; in 1932 2,247 fine oz. was produced, value £9,443, and in 1936 16,723 fine oz., value £117,061.

Mining in Swaziland is confined to alluvial tin, in the vicinity of Mbabane, and gold. Large deposits of coal exist in the low veld, but beyond prospecting nothing has been done to exploit these. In the north-west of the territory a deposit of asbestos was discovered, and the rights have been acquired by a private company.

In 1932, 84 tons of cassiterite tin was mined, value £11,497, and 315 oz. of gold, value £1,542; in 1936 183 tons of tin was mined, value £36,351, and 276 oz. gold, value £1,938.

In Basutoland the chiefs and people are adverse from prospecting of any kind and no development has taken place.

¹ See below, p. 1536.

(c) Southern Rhodesia

Gold. The gold discoveries in South Africa stimulated prospecting farther north in Bechuanaland and Matabeleland. The grant by Lobengula of the Rudd Concession, which was afterwards acquired by the British South Africa Company, gave the latter the sole control of all minerals in his kingdom, but the Company proceeded in the first instance by the grant of licences to prospectors. The pioneers who constituted the first expedition to Mashonaland had been promised fifteen gold claims apiece, and were soon engaged in prospecting near the ancient workings, without, however, finding a gold field of any considerable importance. The size of the producing unit in mining, as in other industries, tends towards an economic level determined by the richness and accessibility of resources, conditions which, in Southern Rhodesia, have promoted an exceptionally large number of small enterprises. The gold-bearing schist belts give rise to most of the richest agricultural soil, so that the mining districts are also best suited for farming, and the miner thus has the advantage of having food supplies near at hand. Further, though the country is sparsely forested, timber is everywhere sufficient for fuel and other requirements. If the territory had been as bare as parts of the Union, the small owner would have suffered a severe handicap, and only deposits large enough to warrant railway branch lines could have been worked. Even under these conditions, several potentially good districts in the south-east and north-west of Mashonaland have been neglected owing to their remoteness from the railways. Gold occurs in a variety of conditions, including rubble and surface deposits, quartz reefs, and replacement bodies. In general the deposits are widely scattered, and many are small and easily worked, conditions that favour the individual miner but do not attract the large corporation. In the early days prospectors concentrated on the search for old workings; the small miner also tended to pass from one property to another after taking out the most accessible ore, a practice that did much to hamper progress. Development was also retarded by a shortage of native labour,¹ which could not be overcome by the use of

¹ See Chap. XI, p. 653.

labour-saving devices since the mines were not large enough to warrant the expenditure, and by the lack of capital for the purchase of plant.

The first mining laws stipulated that a prospect could be worked for profit only by a limited liability company in which 50 per cent. of the vendor interest was allotted to the Chartered Company as owner of mineral rights, though in practice the Company took only 30 per cent. A large number of companies was floated, many of which were primarily speculative, making actual production a secondary consideration. The poor results attained led to a general pessimism regarding the industry. In 1903 the Chartered Company allowed small miners and syndicates to work for profit, and finally in 1907 royalties were substituted for a share basis in all new claims. The number of producers steadily increased, and the value of the gold output rose from less than £1,000,000 in 1904 to approximately £3,900,000 in 1916. There succeeded a period in which many of the smaller mines fell out of production, and in 1931 the output fell to the 1907 level. The increase in the price of gold brought about a rapid growth in the number of small properties from 286 in 1930 to 1,440 in 1937, when they contributed 28·7 per cent. of the total output of £5,656,693, the remainder coming from 32 mines producing more than 1,000 oz. each.¹

The mining laws have been framed with the purpose of encouraging the individual worker, who was described in 1932 by the Secretary for Mines as 'the saviour of the mining industry'. In 1933 the state bought the British South Africa Company's mineral rights. Exceptional assistance has been given to the smaller worker in the way of loans, free testing by the metallurgical laboratory, and free advice from the Government Mines and Geological Departments. The state bears the cost of drilling on approved properties; the cost is charged to the claim, but the owner may free himself by abandoning the property. Nevertheless, there have been periods when the small worker has fallen into straits which called for state aid to enable him to continue operations. The activities of these

¹ Third (Triennial) Empire Mining and Metallurgical Congress, 1930. *Mining Journal Centenary Number*, May 1935. *Report of the Secretary, Department of Mines and Public Works, on Mines, for 1934*, C.S.R. 15, 1935.

small enterprises have led to the exploitation of resources that otherwise might have been neglected, but it may be said with equal truth that the mainstay of the industry has been a group of large mines, some ten in number, which until 1934 produced over 50 per cent. of the output. A tendency towards the policy of encouraging the larger organization was apparent in 1930, when the British South Africa Company, which at that time owned the mineral rights, granted to the Victoria Prospecting Company an exclusive licence over some 9,000 square miles; a proposal to grant a concession over another area was withdrawn owing to the opposition of small workers. The increased price of gold has lately induced mining companies domiciled outside Rhodesia to devote capital to the testing and acquisition of small properties for working under the 'group' system.

Base Minerals. In Southern Rhodesia it is estimated that up to the end of 1936 the total value of mineral products was £131,500,000, of which gold contributed 76·2 per cent., asbestos 9·5 per cent., chrome ore 5·5 per cent., coal 5·5 per cent., and copper 2·2 per cent. Asbestos mining began in 1908 with 55 tons and reached its peak in 1929 with an output of 42,634 tons, valued at £1,186,000. As the Russian output is unknown, Southern Rhodesia is believed to be the second producing country in the world; owing, however, to distance from the market, only the best grades of fibre can be exported with profit. Extensive chrome ore deposits are worked at Selukwe and in the Districts of Lomagundi and Victoria. Production reached 293,116 tons in 1929, but fell to 17,298 tons in 1932, since when under the influence of trade recovery it has risen to 202,159 tons in 1936. Southern Rhodesia is the leading world producer of chrome ore, and strong financial interests are in charge of the major sources of supply; but the industry is handicapped by a number of small properties that cannot guarantee a regular monthly output.

Coal deposits have been found both in the Zambesi valley and the Limpopo basin, but mining operations are restricted to the Wankie fields, 212 miles north-west of Bulawayo, which enjoy a position of advantage for export to the Northern Rhodesia copper-belt and the Congo. The Wankie Company, in which the British South Africa Company has a share interest, holds mining rights

over an area of 400 square miles, estimated to contain not less than 6,000,000,000 tons of coal. The deposits are easily worked and the coal is of good quality, yet the average annual quantity raised during the period 1904-30 was less than 500,000 tons. It reached its peak in 1928 with 1,206,800 tons and fell to 482,925 tons in 1934, the output in 1936 being 777,221 tons. The expansion of the Wankie field is handicapped by the fact that, apart from the railways, the only consumers are the copper mines in the north. The fall in output is attributable to the loss of part of the demand from Katanga, which has developed its own hydro-electric installations and now imports charcoal from Belgium. It also draws some coal supplies from the Luena Collieries, south of Bukama in the Congo, where about 120,000 tons are raised yearly.

(d) Northern Rhodesia

Northern Rhodesia has had a different history of mineral development, for gold has been less in evidence, and the British South Africa Company, which retained the mineral rights on the termination of the Charter, has found that the development of the copper ores could only be secured by the co-operation of powerful financial organizations. By 1903 a few of the copper deposits had already been located, and attempts were made to work these ores almost immediately, but development could not advance until the railway had reached the Congo border in 1909. The deposits often occur at considerable depth, and the presence of a thick laterite covering necessitated costly exploratory work before the value of the ore could be proved. The earlier finds were of oxidized ores, averaging only 3 to 5 per cent. copper, against the 7 per cent. copper of ore in the Belgian Katanga, and attention was for many years diverted to the search for oxidized ores of a higher grade. On these lines no significant progress was made until 1923, when development interests were consolidated in the hands of a small number of powerful companies, who held their rights on condition that they expended a certain minimum amount on the work. The Rhodesian-Congo Border Concessions received rights over 52,000 square miles, and subsequently the Rhokana Corporation, the Luangwa Concessions, and the Rhodesia Mineral Concession

acquired concessions over an aggregate of 206,000 square miles. At the end of 1931 almost half this area had been systematically prospected, over sixty geologists being engaged on the work.

As a result of this scientific exploration, unique in the British areas of Africa, it was found that the deposits entered a sulphide zone at a depth of about 100 feet. This discovery changed the outlook for the industry. Sulphide ores of 3 to 5 per cent. of copper were profitable, whereas oxidized ores of similar grade were almost valueless. By 1930 the copperbelt was in the midst of an extensive development boom, and though in that year the market collapsed, leaving only the Roan Antelope and Nkana Mines active at the end of 1931, nevertheless the Rhodesian mines, working rich and easily mined deposits, or sulphide ores that can be treated by simpler methods than most oxidized ore, have been able to prove themselves among the lowest-cost producers of copper in the world. Their position enabled them to take immediate advantage of the increase in consumption that began in 1933, and mines that closed during the depression have been reopened. During 1935 and 1936 minerals to the value of £5,229,970 and £6,375,929 were produced in Northern Rhodesia. Of a total mineral production of £30,944,989 in the years 1906 to 1936 inclusive, copper constituted 73·17 per cent., lead 9·95 per cent., zinc 8·37 per cent., vanadium 4·5 per cent., cobalt 2·69 per cent., gold 0·9 per cent., and the balance of 0·42 per cent. comprised silver, manganese, mica, tin, and bismuth. Development expenditure had amounted to £17,000,000 by June 1932. The Nkana Mine is believed to be the largest producer of cobalt in the world, and zinc is produced on a large scale at Broken Hill, where it occurs jointly with lead and vanadium. The geological survey undertaken by the concession companies has lately indicated the existence of gold in Northern Rhodesia, but the value of the deposit has not yet been explored.

(e) Nyasaland and Tanganyika

About fifteen years ago the director of the geological survey of Nyasaland estimated the presence of 22,000,000 tons of bauxite on the Malanje plateau of Nyasaland, and analyses suggest that

it would be suitable for the manufacture of aluminium. However, such mineral deposits as may exist in Nyasaland have not yet been exploited. The British South Africa Company and the British Central Africa Company own the rights in about two-fifths of the territory, but systematic prospecting seems to have been delayed pending the negotiations, now concluded, regarding the surface rights in the North Nyasa District.¹

In Tanganyika the German administration gave definite encouragement to prospecting, which, though hampered by transport difficulties and the disturbance associated with conquest, located gold, diamonds, copper, iron, coal, and mica deposits. Gold was mined to a small extent near Mwanza and Sekenke, the value of the output from the latter field exceeding £200,000 prior to 1914, after which it remained inactive until 1929. It is still the most productive mine in the territory. Prospectors discovered and began work in the Lupa goldfields in 1922, and later found diamonds, tin ore, and a number of other gold reefs. Since 1926 the Geological Survey, the institution of which was unduly delayed, and the creation of a Mines Department have greatly facilitated exploratory work. These departments are now combined, with others, in the Department of Lands and Mines. Production suffered at first from want of capital, and experts sent out by important mining companies to the Lupa were discouraged by the lack of communications; as a result the development of the Lupa was left to small prospectors, belonging to a great variety of nationalities. Many of them were farmers from East and South Africa who had suffered from the depression in prices.

The increase in the price of gold assisted operations in Tanganyika by enabling the low-grade ore to be worked at a profit in spite of transport and labour difficulties, and whereas at the beginning of 1933 scarcely a company with any appreciable capital operated on gold interests, a year later five or six major organizations and an equal number of smaller syndicates were opening up and testing prospects, and production grew rapidly in the Musoma and Lupa fields. The latter is still predominantly alluvial, worked largely by small undertakings; but mines such as Buhemba and Mara in Musoma, Saza in the Southern

¹ *Report of the Commission on Emigrant Labour, 1935, para. 128.*

Highlands, and Sekenke in Nkalama are greatly extending the production of reef gold. The output of placer gold, which was nearly 100,000 oz. during 1927-34, was ten times greater than the amount won from reef deposits; of the total gold produced in 1936, 42 per cent. was from reefs, and a further steady increase from this source is said to be expected. Water is plentiful in the Lupa only in the wet season, and the cost of well-sinking is beyond the means of most individual miners, while at greater depths on reef diggings a sulphide zone is reached, which increases the difficulty of extraction. A comprehensive form of assistance for the small worker is now under consideration, whereby small mines of proved promise may be able to obtain metallurgical advice and financial assistance to ensure efficient equipment and production. But the stage is being reached where exploitation of larger-scale recurrences is passing into the hands of organizations with the ability to prove the value of resources by scientific research and development beneath the surface. The value of such research is shown by recent discoveries at Geita, south of Lake Victoria, where important gold-bearing reefs have been indicated. The value of gold produced in the territory, which was £38,630 in 1929, increased to £490,490 in 1936, and in the same year the value of tin produced was £41,784. Coal and iron deposits are believed to be extensive in the south-west, but conditions are unfavourable for their development.

(f) *Kenya*

The initial development in Kenya was largely the work of individual prospectors. Reef gold was mined in South Kavirondo several years before the discovery of rich alluvial deposits in the Kakamega District of North Kavirondo in 1931. The activity of prospectors revealed the existence of payable gold in a number of streams, and subsequently the reefs from which the alluvial metal had been derived were located. Farmers and others affected by the depression turned to the alluvial deposits, which are still being worked, but the industry can be stabilized only by the exploitation of the reefs. This work is now being undertaken by syndicates and companies holding mining titles over large areas of low-grade alluvial, and equipped for production at a lower cost than the

small worker can achieve. The transitional period has seen considerable public interest in the discussion of the respective merits of the individual prospector and the larger financial organization. When Tanganyika Concessions in 1932 applied for a two-year exclusive prospecting licence over 5,900 square miles in Kavirondo and agreed to spend at least £20,000 on exploration during the period, the settlers claimed that individual prospectors, who had by their own efforts discovered the Kakamega fields, would make a more intensive search than a company, which should in their opinion come in after prospectors had found workable deposits.

Sir A. Kitson,¹ in reporting on this issue, advised against the concession to a company of the only areas in which persons with limited means could extract gold at low cost without metallurgical treatment. He distinguished the position of such areas from those containing base metals. In the latter case, where the ores occur under conditions requiring expensive plant for mining, separation, and smelting, strong companies are necessary; similarly, capital beyond individual resources is needed to work reef gold which is associated with one of the base metals, when expensive treatment may be necessary. The strong company can then step in and buy the mine from the discoverer without having to undertake the preliminary prospection. In areas such as Kakamega, however, the smaller prospector for gold had, in his opinion, a legitimate field for his activity. The final decision was in the nature of a compromise: the field was divided into five areas: two, aggregating 1,490 square miles out of 5,900, were thrown open to small companies and private prospectors, and the remaining three were reserved for leasing under exclusive licences to large companies, among which Tanganyika Concessions received one area of 1,550 square miles. Concessions are given on condition that an aerial survey be made and a copy of the map, together with the results of the work done, be sent to the Mines Department. The output of unrefined gold from Kenya increased from 845 oz. in 1929 to 48,635 oz. in 1936. A considerable quantity of sodium carbonate is produced from Lake Magadi, the export for 1936 amounting to 46,549 tons.

¹ Sir A. Kitson, *Geographical Reconnaissances in Kavirondo and other districts of Kenya*.

(g) Uganda

In Uganda before the War such little prospecting as was carried on met with no success, and in subsequent years mining has owed much of its development to the researches of the government Geological Survey. The discovery of gold at Kakamega, the announcement by the Survey of finds in the Eastern and Western Provinces, and the rising price of gold led to considerable activity, and mineral exports increased in value from £44,517 in 1929 to £184,312 in 1936, of which tin ore accounted for £58,844, gold for £92,792, and tantalite for the remainder. No reef gold of any significance has yet been mined, but important copper deposits are in the course of investigation at Kilembe. The tin has been produced almost entirely from lodes or detritus, and its discovery illustrates the fact, noticeable in other areas also, that discoveries of metals such as tin are frequently made in areas previously rejected by holders of large exclusive prospecting licences. Tin ore was first located in 1924; production began in 1927 with 114 tons, and up to the end of June 1937, more than 3,522 tons had been recovered. An interesting example of mineral production which remains under native control comes from Western Uganda. The extraction of salt from the crater lake of Katwe is a traditional native industry, and remains under the control of the native government of Toro. The 1934 production from Katwe and the near-by lake at Kasenyi totalled 2,206 tons of salt and gave rise to a considerable trade in Western Uganda and the adjacent parts of the Belgian Congo.¹

(h) Nigeria

The most important metalliferous mineral yet exploited in Nigeria is cassiterite, which the Hausa have mined and smelted within a hundred miles of Kano from very early times; but finding the local supplies insufficient they took control of the mines worked by pagan tribes on the Bauchi plateau farther south. In 1884 the Niger Company realized that the metal used for tinning the natives' brass-ware was not brought across the desert, as had been sup-

¹ H. B. Thomas and R. Scott, *Uganda*, 1935, pp. 220, 285; 1936 production was 2,560 long tons.

posed, but came from the local interior, and an expedition was sent to Badika, the market for tin, in an attempt to locate the field. A force sent in 1902 to subdue the Emir of Bauchi obtained a sample of tin from the Delimi river near Naraguta, following which a prospecting party was sent out later in the year. Large prospecting areas were taken up by different companies under licence from the Niger Company, and tin-mining quickly developed into an important industry in the Provinces of Bauchi, Zaria, Kano, and Ilorin; the richest of the mines are situated on the Bauchi plateau, an area of about 2,000 square miles. Here deposits are alluvial, and the ore is won by a variety of means, ranging from manual washing to steam shovels or bucket dredges with a dressing plant attached. During a period of boom, expensive machinery was installed, but much of this is now idle, and hand-work is considered the best method for excavating the tin-bearing earth. Mining is also extensively carried on by natives under headmen, working as 'tributers' for individual Europeans and companies. The product is a concentrate of tin oxide with a metal equivalent of at least 70 per cent., and is for smelting exported in this form.

Extensive developments began in 1910, when companies were floated to work areas acquired from the Niger Company, but lack of communications held up expansion until the railway was brought to Naraguta in 1914, and to Bukuru in the following year. The War interrupted activities, while subsequently the international tin restriction agreement, first adopted voluntarily by the producers and then made compulsory by government, confined production to existing mines. The peak output of 15,335 tons in 1929 made Nigeria the fourth tin-producing area of the world; in 1933, the restriction scheme reduced production to 4,956 tons; in 1936, at 13,432 tons it represented the second largest output in the British Empire, with a value of £2,011,000.

The second important mineral of Nigeria is gold, which has been mined by a few small companies, but chiefly by individuals, since 1914, but owing to lack of capital, development is still confined to the alluvial stage. The Associated Tin Mines of Nigeria investigated superficial deposits of gold in the Niger Province during 1931, but, though the results were promising, the low-grade character of the ore has not attracted large financial groups. It has

been contended that the mining laws are unfavourable to enterprise, in that leases are too restricted in size, in view of the large outlay which is required on preliminary work before production can begin.¹ The gold output in 1936 was 33,364 oz., valued at £233,780. The coal output is also of some dimensions. The colliery situated at Enugu, 151 miles from Port Harcourt, began to yield coal in 1915, and is owned and worked by the government. It is capable of producing 400,000 tons a year, which exceeds the local demand; further prospecting for coal is therefore prohibited. The mine supplies the railway both in Nigeria and the Gold Coast, and ships that call at Port Harcourt. Operating costs are small, but owing to high transport charges the price is 14s. at the port and 30s. at Lagos, where Welsh coal is actually cheaper, and in order to retain the Gold Coast trade haulage charges have been so adjusted that Nigerian coal is supplied to the railways at rates which will prevent competition from Lagos. Nigeria exported 511 tons of columbite in 1936 and is said to be the world's source of supply.

(i) *The Gold Coast*

On the Gold Coast gold, though its existence was long known to Europeans, was, apart from sporadic efforts by the Portuguese, left in the hands of natives until the late seventies. Samples of gold-bearing quartz from the Gold Coast were brought to Europe after the Ashanti War of 1873, and a prospecting company was formed. In 1877 the Frenchman Bonnat, who had been imprisoned by the Ashanti, disclosed the existence of the Tarkwa mines, then being worked by some 6,000 natives.² Their workings were left undisturbed and the surrounding lands were leased to a French company, which eventually took over the native reservation when lack of water caused its abandonment.³ Activities then greatly increased; numerous concessions were obtained, old native workings were explored to greater depths, and individuals and companies prospected for minerals in new ground; but progress was slow, and output did not exceed 18,000 fine ounces a year until the boom of 1900-2. Though operations at first centred on the older

¹ W. C. Grummett, 'The Gold-bearing Country East of Minna, Northern Nigeria', *The Mining Magazine*, vol. xlix, no. 3, 1933.

² N. R. Junner, *op. cit.*, p. 8.

³ O. A. L. Whitelaw, 'Drilling on the Gold Coast', *Institution of Petroleum Technologists*, vol. xv, 1929.

native workings, the surveys made by the Geological Department, and the systematic work carried out of late years by mining companies, have shown promising prospects at many places where no evidence existed of native activity.

Gold occurs in alluvial deposits in quartz reefs, and in sedimentary beds of the 'banket' type similar to the deposits of the Rand. The main gold-mining centres are Obuasi, said to be one of the richest mines of its size in the world; Tarkwa, where 'banket' is being worked and developed on a considerable scale, and Prestea, Bibiani, Marlu, and Kanongo. Two dredges are in operation on the Tano river and others are to work on the flats of the Ankobra river. Only the best parts of mines have so far been thoroughly exploited, and it would appear that with improvement in operating methods considerable further developments may be looked for in the future. Production in fine ounces grew from 246,075 in 1930-1 to 428,144, valued at £1,818,756, in 1936. The export of manganese is now of growing importance, having amounted to 411,024 dry tons valued at £612,930 in 1936. Diamonds are dealt with separately on pages 1509-12.

(j) *Sierra Leone*

In Sierra Leone minerals of economic value were unknown until government geologists discovered important deposits of gold, diamond, platinum, and iron ore in the years 1926-31. The production of gold is confined to alluvial deposits, and is carried on by a number of comparatively small enterprises, one concern alone being responsible for over a quarter of the output. There has been considerable development in the production of iron ore from the Marampa mines, and prospecting is being carried out in connexion with haematite deposits in the Simbili and Numbara hills. In 1936 mineral production was 40,764 ounces of gold, 484 ounces of platinum, and 566,595 tons of iron ore; the total value, including diamonds, being £1,249,695.¹

(k) *The French Territories*

In French West Africa policy was for some time directed to the development of agricultural rather than of mineral products.

¹ See below, p. 1514.

There was already an active native gold-mining industry, and the customary rights of the community engaged in it were respected, considerable areas being excluded from prospecting by Europeans, notably in Siguiri, the Canton of Boauri, and a large part of Sieke.¹ European enterprise was slow to give attention to mineral exploitation. In the French Sudan during the ten years between 1902 and 1912 forty-three *permis d'exploitation*, covering an area of 68,600 hectares, were issued; and in Guinea in the period 1901-8 395 permits were granted over an area of 2,450,000 hectares, of which more than a fourth was in the *cercle* of Siguiri. Many holders of permits, however, did no prospecting, and only one company, the *Société des Mines de Falémé-Gambia*, which operates placer-gold dredging on the Falémé river on the Sudan-Senegal frontier, reached the producing stage. Development has been equally slow in the French Cameroons, which has only of recent years attracted the attention of prospecting companies. In French Equatorial Africa mineral rights were expressly excluded from the large land and rubber concessions granted to Europeans; prospecting did not begin until 1911, and little exploitation took place until 1929.²

The gold premium has, however, stimulated activity in recent years; the number of prospecting licences in French West Africa increased considerably between 1933 and 1934,³ and the exports of gold from the federation, the largest producer in the French Empire, were 66 kilograms in 1929, 2,066 in 1932, and 3,039 in 1934, the value of the total output for the five years before 1934 amounting to over 150,000,000 francs. But only a small proportion (in 1934 just over 4 per cent.) is won by Europeans, mainly by the dredging company on the river Falémé, which produces about 100 kilograms a year. The more important centres of native mining are the District of Siguiri, in the north-east of Guinea, which provided 72 per cent. of the exports, the region of Satadougou, and parts of the Ivory Coast. French Equatorial Africa, where gold mining began only in 1929, produced 806 kilograms in 1933. In the Cameroons prospecting is now being actively pursued along the confines of the

¹ *Afrique occidentale française*, no. 153, 1933, p. 291.

² Publications du Bureau d'Études Géologiques Minières Coloniales, *Les ressources minérales de la France d'outre-mer*, 1935, p. 180.

³ *Annuaire statistique de l'Afrique occidentale française*, 1933-4.

Ubangi-Shari, whence a small shipment of gold was made in 1934, production rising from 13 kilograms in 1934 to 88 in 1935.

The statistics of exports from French West Africa do not reflect the amount actually produced, for much of the native gold coming from Senegal and the Sudan had been hoarded and was released during the depression. The total production of new gold in French West Africa was estimated to be 1,608 kilograms in 1933, against 2,138 kilograms exported. The natives usually work alluvial ground only, although lodes have been developed to a limited depth in the Ivory Coast, shafts in some places being sunk to a depth of 15 metres. Throughout, the technique employed is crude and wasteful. For nearly six months of the year during the wet season the mines are unworkable; the tunnels frequently collapse owing to weak supports; and the method of extraction results in the loss of a considerable proportion of auriferous gravel and gold. Despite these difficulties, some 20,000 native miners are at work in Guinea, and a population of 60,000 is dependent on the industry. The Mines Department has been instructing the workers of the Ivory Coast in the use of sluices and other improved methods of production. French writers have pointed to the anomaly that where natives can win a substantial production of gold, European enterprise has so far achieved little; in their view prospectors have assumed that the only sources of gold are those already being worked by natives, though it has been proved that adequate deposits occur where no native workings exist.¹ It is perhaps true that the Europeans engaged in prospecting have allowed themselves to be unduly deterred by the previous failure of enterprises undertaken without systematic investigation or adequate capital. The government itself has come under some reproach for lack of interest in mineral development;² only of late years has it undertaken a systematic geological survey; now, however, it is also conducting a special survey of the central Niger area through the *Office du Niger*.³ The latter has already indicated both gold and mineral deposits.

¹ G. Daumain, *op. cit.*, p. 441.

² E. du Vivier de Streel, 'Les ressources minières de notre empire d'outre-mer', *Revue des deux mondes*, 1934, pp. 916-35; M. Blondel, 'Les mines dans les colonies françaises', *Revue de l'industrie minérale*, no. 230, 1930, p. 310.

³ See Chap. XV, p. 1050.

(1) The Belgian Congo

The Belgian Congo presents, on the whole, a picture of greater activity than the French territories. Only a minor part of the development has been due to the prospector or small enterprise. The state from the first sought to find in export production a means of increasing its own resources in order to meet the heavy cost of communications and administrative development in a country of low taxable capacity, and the knowledge that copper occurred in the Katanga accentuated its anxiety to conserve a right over this area, at a time when the British South Africa Company was seeking agreements which would extend its control northwards. In promoting mineral development the government has availed itself largely of the support afforded by the financial interests united in the *Société Générale de Belgique*. A geological survey was initiated in 1891 in Katanga, the copper deposits of which formed a valuable first line of development. Here at least 150 deposits of various minerals have been located in a belt 200 miles long and 15 to 60 miles wide; the proved copper reserves in this area and in the adjoining field of Northern Rhodesia together are believed to form over one-third of the world's known resources. The majority of the copper ore-bodies are composed of oxide copper minerals which at comparatively shallow depths pass into disseminated copper sulphides so low in grade that they cannot be mined profitably. There are exceptions of which the Kipushi Mine is the most notable; here bodies of copper sulphides average 15 to 20 per cent. of copper and about 12 ounces of silver per ton. Drilling has disclosed copper deposits at Musoshi and Tshinsenda similar in type to those of Northern Rhodesia, but less regular in their mode of occurrence and of lower average copper content. The metal occurs in large hills standing above the level of the country, and outcrops are comparatively frequent, which accounts for the speed with which the Katanga deposits were exploited in comparison with those of Rhodesia.

In 1891 an exclusive right to minerals in this area was given to the *Compagnie du Katanga*, which in 1900 created a development company, the *Comité Spécial du Katanga*. This company, in turn, conceded a prospecting monopoly to an English group, Tanganyika

Concessions, formed by Sir Robert Williams, whose company was able to provide the technical knowledge which the Belgians at that time lacked. Eventually, the sole right of exploiting the mineral resources of Katanga, extending over an area of 15,000 square kilometres, was assigned until 1990 to the *Union Minière du Haut Katanga*, representing jointly the Tanganyika Concessions, the *Comité Spécial du Katanga*, and the *Société Générale de Belgique*. Apart from the area in which it has exclusive rights over copper mines, the *Union Minière* holds a concession for working tin deposits over a total of 12,000 square kilometres.

Active development of the copper deposits was delayed until the railway, which reached Élisabethville in 1910, provided the mines with an outlet for their products to Beira, and enabled coal to be brought from Wankie and stores from the port and from South Africa. The *Union Minière* began producing in 1911, when the output was 1,000 metric tons. The War stimulated activities, and in 1918 over 20,000 tons was produced. The rate of expansion was steadily maintained, except during the economic depression of 1931-3, and in 1936 the output was 97,500 tons, about 10 per cent. less than in the previous year. In addition to copper, the rich uranium ore at Chinkolobwe, 110 miles from Élisabethville, is one of the chief sources of the world's supply of radium.¹ The *Union Minière* affords a conspicuous example of the manner in which a large monopoly right can be used for the scientific exploitation of mineral resources. It has conducted a careful geological and topographical survey of the area it holds, and has devoted great care to the welfare conditions of its labour.²

The second line of development in the Congo has been gold, the highest production of which is at the Kilo-Moto Mines, some of which were discovered in 1895 by M. Henry and others in 1903 by Australian prospectors in the employ of the Free State. The mines began production in 1905. Ten years after annexation the Congo Government decided to open up new deposits and generally to 'industrialize' the mines. It decided that the administration itself was not equipped to carry out a programme of this nature, and for the purpose created a special organization, the *Régie Industrielle*

¹ Important uranium deposits have also been found at the Great Bear Lake in Canada.

² See Chap. XI, p. 681.

des Mines de Kilo-Moto. In 1926 the *Régie*, in its turn, was converted into the *Société des Mines d'Or de Kilo-Moto*, a joint stock company with a nominal capital of 230,000,000 francs consisting of 200,000 shares of 1,000 francs each, and 60,000 preference shares of 500 francs. All the former and two-thirds of the preference shares were allotted to the state. The remaining 10,000,000 francs constituted liquid capital, subscribed mainly by banking houses. Fixed dividends are paid to private shareholders, and the balance of net profits is paid into state revenue. The company successfully works deposits mainly alluvial, but of unusually low-grade character.

An associated undertaking, the *Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs Africains*, holds exclusive mineral rights over 8,000,000 hectares in other parts of the territory. It threw open to public prospecting a zone of 200 kilometres on the right bank of the Congo and ceded an area to the *Comité National du Kivu*, which also has rights over all mines not previously conceded, in a belt 100 kilometres wide extending from Lake Tanganyika to the south of Lake Albert. Mineral products contributed 70·5 per cent. of the total value of exports from the Congo in 1931; in 1933 the proportion had declined to 54·3 per cent., and in 1935 it was 62·4 per cent., the decrease from 1931 being due mainly to the contraction of the market for copper and diamonds. In 1936 the value of minerals exported was 913,000,000 francs, of which gold contributed 38·8 per cent., copper 34 per cent., tin 15·8 per cent., and precious stones 11·4 per cent.

(m) *Portuguese East Africa*

Portuguese East Africa produces a small amount of gold, amounting to 10,195 oz. valued at £42,829 in 1934, mainly in Manica under the administration of the Moçambique Company. Coal deposits occur in several areas between Tete and the Nyasaland border, and in the Zambesi basin opposite Tete. In the latter region a Belgian company is producing about 10,000 tons of coal a year for plantations lower down the river. It is understood that the Portuguese Government has sanctioned the building of a railway to connect the coal field with the main line from Beira to Nyasaland, which, when completed, will enable output to be considerably increased.

III. DEVELOPMENT OF THE DIAMOND INDUSTRY

(a) *South Africa*

For the reasons stated on page 1486 diamonds have been reserved for separate treatment. The diamond has borne so large a part in African history as to justify a study of the industry in some detail. The early discoveries in the Cape and Free State resulted from a sporadic picking over of gravel along river beds. At first the Kimberley 'pipes' were worked under conditions suited to alluvial diggings, in small and much subdivided claims, but these methods became impossible as the deposits were followed deeper into the earth and, in addition, the unrestricted sales soon began to depress market values. It became clear that without capital and an elaborate organization neither subterranean mining nor the control of production was possible; the claims were therefore consolidated under joint stock companies, which were then amalgamated, until by 1892 De Beers controlled all the mines of Kimberley. Rhodes, aiming further at a monopoly over all diamond mines in the sub-continent, acquired rights in every locality where a discovery threatened the interest of De Beers. When he secured the Charter for the British South Africa Company he obtained for De Beers all diamond rights in the Rhodesias and part of Bechuanaland. The company at first underestimated the richness of the Premier Mine at Pretoria, the biggest find since the opening of the Kimberley group, but it eventually bought a controlling interest in the property.

The products of the alluvial diggings did not at first threaten the prosperity of the mines. From the beginning the alluvial diggings scattered along the Vaal river in Griqualand West and spreading up to Klerksdorp in the Transvaal had provided employment for numerous small companies and individuals, many of whom were people of rural origin unable to make a living on the farms. Diggers could obtain a licence on almost nominal terms. Whenever a new field was proclaimed a 'rush' ensued, but only a few were successful and the rest drifted back to the farms and towns. The bulk of the diggers lived in extreme poverty; in 1929 about 45 per cent. of those in the Transvaal were stated

to be living on an average of £5 a month or less.¹ Until after the War the output of alluvial stones did not exceed 10 per cent. of the total production for the Union, and the mines found no difficulty in adjusting their production to this supply. In 1925, as a result of the first scientific attempt to trace the origin of the Vaal alluvial diamonds, rich deposits were located in the Lichtenburg and Rustenburg Districts of the Transvaal. In the following year government, sympathetic to the diggers, threw open the Lichtenburg fields, and at the end of the year 80,000 Europeans and over 100,000 other persons were living on the diggings. Between 1925 and 1927 the production of alluvial stones rose from 239,257 to 2,318,407 carats, while the average value per carat, which normally was three times that of mine stones, fell from £7 19s. 5d. to £2 13s. 6d. In the same period the mines' production remained roughly constant at 2,250,000 carats, valued at £2 18s. per carat. For the first time the production and value of mine and alluvial stones were now approximately the same. The controlling companies were forced to buy up large quantities of alluvial diamonds to maintain prices.

The next threat to the stability of the industry came from Namaqualand, where the existence of diamonds, though known for many years, had not attracted attention until Dr. Merensky in 1925-7 showed that diamantiferous ground extended for over 100 miles southward from the Orange river mouth and northwards into South-West Africa. Free production in this rich field, where diamonds could be extracted at the cost of 1 per cent. of their value, would have destroyed the market. In 1927 the Precious Stones Act was passed, and the government prohibited prospecting in the area, except for 100 discoverers' claims allocated to the Merensky Syndicate near Alexander Bay, and the farm Klein-zee at Buffelsrivier mouth operated by the Cape Coast Exploration Company. Subsequently, a valuable area of twenty square miles was reserved as government diggings. The state itself thus acquired a direct interest as a producer and marketer of diamonds.

At the same time the Act also modified the previous policy

¹ *Report of the Carnegie Commission on the Poor White Problem in South Africa, 1932, part i, p. 153.*

in regard to the alluvial diggers in the Union. It preserves to private landowners exclusive prospecting rights on their land, but enables regulations to be made which, while allowing for the grant of permits to diggers, practically excludes companies and syndicates. A limit may be fixed to the total amount of alluvial production, and a severe restriction of the number of diggers' permits has been made applicable to any diggings which may be proclaimed in future.¹ These measures, together with the exhaustion of the Lichtenburg fields, reduced the output of alluvial stones to 918,706 carats at £3 6s. 9d. per carat in 1930.

The London Diamond Buying Syndicate had been formed in 1893 to market all the diamonds of the chief South African producers, and after the War it made further agreements with the South-West African interests, formerly the Union's largest competitor. But other countries began to assume prominence in the industry and South Africa gradually lost her dominant position. Whereas she produced 76 per cent. of the world output in 1913, in 1925 the percentage had dropped to 57. By this time the Syndicate had ceased to be a reliable check, and the Diamond Control Act was passed in 1925 enabling the Union Government to control the mining and disposal of stones in the absence of an approved producers' agreement. The mines set up a more powerful syndicate, and its operation and the abnormal demand that existed during the 'boom' period in the United States (which took 80 per cent. of the world production) helped to protect the market from the shocks caused by the phenomenal increase in supplies from the Transvaal and Namaqualand alluvial fields referred to above. But the economic crisis of 1929 again placed the industry in a precarious position, and eventually De Beers, which had bought controlling interests in the other important companies of South Africa, floated a new organization, the Diamond Corporation, Limited, which replaced the old Syndicate and took over the accumulated stocks. This centralization opened the way for an agreement between the government and De Beers. Each member of the association, including the government, which as is shown above had now a direct interest as producer, received a fixed percentage of the trade, and the sale of diamonds was entrusted

¹ *Ibid.*, p. 150.

to the Diamond Trading Company, Limited, a subsidiary of the Corporation. An Act of the Union Parliament established Kimberley as the only place of export for diamonds in the Union; sales of uncut stones were allowed at three centres only—Kimberley, London, and Amsterdam—at uniform prices. Further, the Corporation, under agreement with the companies working important deposits in Belgian Congo, Angola, and British West Africa, buys all their stones and markets them with the South African diamonds through the same channels.

From the first discoveries of diamonds in 1870 up to the end of 1934 the value of the Union's output exceeded £316,000,000, and the net dividends of the producing companies have amounted to more than £80,000,000, excluding the profits of individuals prior to the company era and subsequently on the alluvial diggings. This wealth has probably been greater than that which has been obtained from any other commodity in the same time anywhere in the world, when the size of the industry is taken into account.¹ During the depression period sales fell to a sixth of their maximum and the South African mines ceased to work; in 1934 the production fell to 440,313 carats. Early in 1935, signs of recovery appeared and some of the mines resumed operations. Meanwhile, deposits that have been discovered or are suspected to exist in Namaqualand and elsewhere remain untouched. South African diamonds are used chiefly for gem purposes, and in value the sales exceed the total production of all other countries. In quantity, however, the stones from other parts now form approximately two-thirds of the world output. Various African territories have been responsible for reversing the balance, as will be seen from the following table:

TABLE XVI
Diamond Production in Metric Carats
(In thousands)

	1913	1920	1927	1932	1934	1935	1936
South Africa . . .	5,300	2,612	4,708	798	440	677	624
South-West Africa . .	1,570	606	683	18	4	128	185
Belgian Congo . . .	..	231	281	3,872	1,450	3,168	4,600
Gold Coast . . .	..	0.1	461	842	2,392	1,350	1,415
Sierra Leone . . .	..	..	..	0.75	68	295	616
Angola . . .	..	93	201	367	453	..	..

¹ S. H. Frankel, *op. cit.*, chap. iii, pp. 52 ff.

(b) South-West Africa

In South-West Africa pipes of kimberlite were found shortly after the German annexation, but in spite of systematic prospecting no diamond has been found in the concentrate. The country produces detrital stones, which, though small, are of exceptional brilliance. The chief alluvial deposits occur in patches over a stretch of 300 miles from the mouth of the Orange river to Conception Bay. Before the War, one South African and fifteen German companies extracted diamonds from the gravel; after the War the Consolidated Diamond Mines of South-West Africa bought the German interests, and now control 80-90 per cent. of the annual sales. The discovery of the Namaqualand deposits¹ led to active prospecting on the north bank of the Orange river, and diamond-bearing terraces were found that are likely to become important when the market recovers. In 1927 the government prohibited prospecting on all surveyed farms along the Orange and unsurveyed government ground up to two miles from the river. The whole of the Kaokoveld was afterwards closed to prospecting for diamonds. Work ceased on the Consolidated Diamond Mines diggings in 1932, but was resumed in 1934. The maximum number of diamonds won was 723,877 carats in 1927; this sank as low as 2,374 in 1933; it was 196,803 in 1937. The price has varied from a maximum of 126s. a carat to 34s.

(c) Tanganyika, Gold Coast, and Sierra Leone

At least forty kimberlite occurrences have been found in Tanganyika in the Districts of Mabuki and Shinyanga and on the Iramba plateau, but so far production has been confined to superficial deposits near the pipes, chiefly from the Sultan Mine near Shinyanga. Claims were pegged as far back as 1910, but operations began on a significant scale only in 1925. The value of the output reached a peak in 1927 with £101,480 and declined to £1,859 in 1932, the figure for 1936 being £6,252. In the Gold Coast the first discovery of diamonds was made in 1919 by the Geological Survey near the Birim river. The stones have since been found over a wide area of some 10,000 square miles. They

¹ See above, p. 1513.

are small, and are used mainly in industry and the 'small jewelry' trade. They occur in payable quantities in the Birim river basin, where deposits are being worked near Akwatia and Atiankama by two large companies, the African Selection Trust and the West Diamond Syndicate, and by some smaller concerns, and in the Bonsa valley, south-west of Tarkwa, where they are being worked by the Africans. In 1936 1,489,410 carats, valued at £601,636, were exported. In Sierra Leone, after officers of the Geological Survey had found diamonds on the banks of the Gbobra river during 1930, an exclusive prospecting licence over the whole territory was granted to the Consolidated African Selection Trust, which has carried out prospecting with encouraging results. In 1936 the output was 616,200 carats, valued at £725,000, which considerably exceeds that for 1935, which was 295,483 carats, valued at £402,000. The same company also holds the sole right of prospecting for diamonds in Nigeria, where stones were recently found in gold workings, but production has not yet begun.

(d) *French Africa, Belgian Congo, and Angola*

The first discovery of diamonds in French Equatorial Africa was made in 1914-15 in the neighbourhood of the Ippy. A company was organized to prospect for two years in the region of the Ubangi-Shari, but it met with no success. Prospectors sent out in 1926 by the *Compagnie Équatoriale de Mines* located diamond deposits 120 kilometres north-east of Ippy, in the region of Bria; further searches revealed workable alluvial deposits north of Bria, and exploitation began in 1931 with an output of 1,509 carats.¹

The Belgian Congo has supplanted South Africa as the country producing the largest weight of diamonds. Kimberlite deposits, some of them diamantiferous, have been found on the Kundelungu plateau in Katanga, but none has proved worthy of exploitation. The Congo stones come from alluvial ground located in several parts of the Katanga Province, by far the most important being deposits that extend from the basin of the Kasai river over into Angola, the whole area of 150,000 square miles constituting the

¹ J. L. Middleton, 'Diamonds in Equatorial Africa', *Engineering and Mining Journal*, vol. 138, 1932. Imperial Institute Publications, *Gemstones*, 1933.

largest alluvial diamond field in the world. The first discovery was made in 1911, but exploitation could not begin until a motor road had been constructed to the navigable head of the Kasai river in 1913. The centre of operations is Tshikapa, and five large companies are now at work, all of them off-shoots of the Belgian-American organization, the *Société Internationale Forestière et Minière du Congo*, generally known as the *Forminière*. The government holds half the capital of the *Forminière* and of the subsidiary concerns except one, the *Société Minière de Bécéka*, which pays half-profits to the state after deducting an agreed amount for the reserve fund and 5 per cent. for dividends. Exports from the Congo were 4,634,266 carats in 1936, an increase of 22 per cent. over the previous year.

The Angola fields, a continuation of the Belgian Congo deposits, are worked in the Lunda District close to the border by the *Companhia de Diamantes de Angola* (*Diamang*), which holds mining rights in the territory tenable up to 1951. The *Diamang* is an off-shoot of the *Forminière*, and began operations in 1913. As in the Congo, production has greatly expanded in recent years, and exports grew from 239,000 carats in 1928 to 444,496 carats in 1934. The marketing of stones is handled exclusively by the Diamond Corporation.

IV. ADMINISTRATIONS AND THE MINERAL INDUSTRY

(a) *State Mining*

It will have been seen that in only a few instances have mineral resources been directly exploited by government agency, and then only for exceptional reasons. The Alexander Bay diamond diggings were taken over by the South African Government at a time when over-production threatened the diamond trade,¹ and the institution of state ownership obviated the choice between opening the fields to general prospecting and reserving them for the large combines. The Transvaal administration worked a tin mine in Potgietersrust during 1907 and 1908, mainly in order to relieve unemployment, but the undertaking proved unprofitable and was sold. The provision in the Transvaal Precious and Base Metals

¹ See above, p. 1510.

Act of 1908, which empowers the state to undertake mining, has not been operated. The Enugu Colliery in Nigeria was developed during the War, and the bulk of its output is consumed by government services.¹ The development of the Kilo-Moto gold mines in the Congo by state agency ended in 1926,² though the state has retained a large share in the joint stock company now operating them. It is a characteristic of the Belgian system that the state retains a share in all the companies developing minerals and diamonds, preferring this to a system of royalties or taxation of profits; the system has some similarity to that in force in the Union in regard to the leasing of gold mines.³

(b) Geological and Mineral Surveys

The administrations have, however, made their own contribution to development in an indirect form by the institution of geological and mineral surveys. In South Africa the Geological Commission for the Cape was organized in 1895, followed by similar organizations in the Transvaal and Natal, and in 1912 these were united to form the Geological Survey of South Africa. In several of the other territories mineral surveys were arranged with the aid of the Imperial Institute, and these led up to the establishment of geological surveys, which came into being towards and after the end of the War, partly as a result of the recognition of the value of minerals for military as well as economic purposes. Survey Departments exist now in all the British territories except the Gambia, where a special investigation was made by an officer from the Gold Coast, and Northern Rhodesia, where all geological work has been undertaken by the mining combines.⁴ The Departments have made important discoveries of valuable minerals, particularly in the West African territories, but their primary object is to provide geological data by systematic mapping of the country, and thereby to indicate where rich mineralized areas are likely to be situated; the work of locating workable deposits is, with good reason, left to commercial enterprise. Some territories, such as Nigeria, have concentrated on the study of

¹ See above, p. 1502.

³ See below, p. 1523.

² See above, pp. 1507-8.

⁴ See above, pp. 1495-6.

water supply and there has been a shortage of technical staff for other investigations.

It must be noted, moreover, that governments have differed widely in the view which they have held concerning the importance of geological surveys and the provision necessary for them. In some territories such survey is of the character of a mere reconnaissance and has rendered only minor assistance to development. This is the case particularly in Kenya, where there was no official geologist previous to the discovery of gold at Kakamega.¹ The provision of an adequate staff for such work presents difficulties; without specialist workers in subjects such as petrology and palaeontology, geological survey cannot be carried out effectively; geological facts must, moreover, be studied over wide areas, so that limitation by state boundaries tends to retard progress. For these reasons the amalgamation of existing geological surveys in groups has frequently been advocated.² Each of the major French territories has a permanent Geological and Mining Department. In the Belgian Congo much of the geological survey has been left to the companies holding mining concessions, and the *Union Minière* in particular has surveyed the southern region of the Katanga in close detail. In addition, numerous temporary commissions have been sent out from Belgium, and a comprehensive programme of mapping is undertaken by a commission in Brussels.³

The direct influence of governments on mineral development, however, is seen more prominently in the conditions laid down for prospecting and winning metals and the claims made on the product whether by way of royalty or taxation. Regulations of this type can have a profound effect on prospection and mining, the more so as they also determine whether development shall be in the hands of the small prospector or capitalist, or entrusted to large financial organizations. The character of these regulations in turn is shaped to a great extent by the system of tenure applied to mining rights. A study of the existing regulations dealing with prospecting or the grant of licences to win minerals reveals a great

¹ Chap. XII, p. 751.

² E. B. Worthington, *Science in Africa*, 1938, chap. iii.

³ See the *Atlas du Katanga* compiled by H. Droogmans, M. Robert, and G. Maury, published by the *Comité Spécial du Katanga*, 1928 onwards.

diversity of local practice which it would be of little value to examine in detail. Taking, indeed, areas in which there is a similarity of general policy, such as the British and French colonies, the diversity of detail in the rules applicable is difficult to justify on any ground of principle and cannot fail to be embarrassing to prospecting interests; there seems, for instance, no benefit in maintaining in neighbouring territories differences in the detail of prospecting fees payable, the area over which an exclusive licence operates, or the time for which it lasts. For the present purpose it is advisable to confine the study to four principal topics: the position taken up by different states in regard to the ownership of mineral rights, the regulations regarding prospection over land in the occupation of natives, the value which is attributed to development through the individual prospector or small capitalist, as against the larger financial organization, and the policy followed in taking a share of the proceeds of the mineral industry for public revenues by way of royalties or through taxation.

(c) The Ownership of Mineral Rights

In South Africa, in accordance with the principles of Roman-Dutch law, ownership of land included all values in the land, and those who held land in proprietary title were held to own the mineral rights. But the discovery of the Kimberley deposits and the subsequent activity in prospecting led to a considerable modification of this principle by laws which, though at first applied to the regulation of mining on public lands, were soon extended to private lands, where the state asserted the power to restrict the rights of owners over minerals even when they were not reserved to it by title. In this event the owner could prospect without licence whereas other persons required his consent, except in Natal; the land could not be proclaimed as a public diggings in the Cape and Natal nor in the other provinces without his consent unless he had permitted prospecting, subject to the provision in the Transvaal that the government in certain circumstances could proclaim the land after twelve months' notice to the owner; and he had the entire disposal of mineral rights in the Cape, while in the Transvaal and Orange Free State he was allowed to reserve a portion of his land for mining on his own account, and received a share

of the licence fees paid by claim- and stand-holders.¹ Of late years all alienations of Crown land contain reservations of minerals to the Crown, and the Precious Stones Act of 1927 reserves to the state rights over all precious stones.

In Bechuanaland the Crown recognized the grant of mineral rights included in the original concession to the Tati Company, and it has used the rights which it claimed over all other lands to grant to companies the mineral rights over the majority of the 'reserve' and Crown area lands; part of the royalties will by the terms of these concessions be paid to the tribes in the reserves. In Swaziland the concessions obtained from the King between 1885 and 1889 covered the mineral rights in nearly the whole country, but the Crown has recovered them in twenty-one areas covering approximately 2,000 square miles. In Basutoland no concession of mineral rights has been given. In Southern Rhodesia there was never any doubt from the first that the treaty rights acquired by the British South Africa Company from Lobengula gave it a claim to the minerals,² and the arrangements made on the termination of the Charter left these rights with the Company. They were acquired in 1933 by the Government of Southern Rhodesia for £2,000,000, an investment which at one time appeared to be of doubtful value but which circumstances are now rendering remunerative. Similarly, in Northern Rhodesia the termination of the Charter left the mineral rights with the Company,³ but in this case they were not acquired by the new government, which consequently has no claim to mining royalties.

In Nyasaland the British South Africa Company holds the mineral rights over an area in North and Central Nyasaland amounting to about 9,500,000 acres; over the remaining areas not covered by certificates of claim the Crown has retained mineral rights. In Uganda the owners of the Mailo estates were allowed to retain the mineral rights subject to a payment of 10 per cent. royalty to the Crown, but in all other areas the Crown retains rights over minerals. It has similarly retained such rights in Kenya⁴

¹ Acts 31 of 1898 and 16 of 1907 (Cape); Act 43 of 1899 (Natal); Ordinances 3 of 1904 and 8 of 1904 (Orange Free State); Act 35 of 1908 (Transvaal).

² See Chap. XII, p. 732.

³ Ibid., p. 739.

⁴ In the coastal areas of Kenya the rights of the Crown are doubtful, and where titles have been issued the right of minerals goes with them.

and Nigeria, although in the latter territory half the royalties received from mining in the greater part of the Protectorate are paid to the Royal Niger Company under an agreement concluded for a period of ninety-nine years. The law in the British Cameroons makes a similar reservation of all mineral rights to the Crown. In the Gold Coast Colony and Ashanti rights to minerals have been held to follow rights in land, and the disposal of them has been left to the native chiefs subject to regulation by the Concessions Ordinance,¹ but in the Northern Territories the Nigerian law has been applied. The northern portion of British Togoland follows the Nigerian law while the southern follows the Gold Coast precedent.

In French colonial areas the state has reserved to itself the right to minerals, which are expressly excluded from any concessions of land made. A Decree of July 6, 1899,² provided for the reservation of the customary rights of natives to exploit minerals, and prohibited the grant of concessions in areas where this right was exercised, but the natives were not treated as the owners of the sub-soil rights. It is in pursuance of these provisions that natives work the gold deposits in Siguiri. The reservation of mineral rights to the state has been applied to French Cameroons and French Togoland. The law in the Belgian Congo similarly recognizes the claim of the state to all mineral rights,³ and since the annexation by Belgium any mineral concession has, under the Law of October 18, 1908, required the authorization of the home government. The great mineral concessions given to companies such as the *Comité Spécial du Katanga* and the *Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs Africains* in the days of the Free State were maintained by the Belgian Government, which has itself granted mineral rights in a large area to the *Comité National du Kivu*. Ruanda-Urundi has applied the Congo law, which reserves mineral rights to the state.⁴

These differences of treatment have an historical rather than

¹ See Chap. XII, pp. 776-7.

² Decrees of July 5, 1899, Oct. 22, 1926, Oct. 13, 1933 (French West Africa), and July 8, 1926, Dec. 23, 1934 (French Equatorial Africa).

³ Decree of June 8, 1888.

⁴ T. Heyse and H. Leonard, *Régime des concessions et concessions de terres et de mines du Congo belge*, 1932, p. 324.

a logical origin, and it would hardly be of value to canvass now the comparative merits of the system under which the state has retained mineral rights for itself as against that in which they have been allowed to follow the ownership of surface rights. Experience has, however, shown, as for instance in the Gold Coast Colony,¹ that if circumstances or a clearer view of policy had allowed the state everywhere to keep the ultimate ownership of minerals in its own hands, that course would, apart from any gain to public revenues, have allowed of a more beneficial use of these resources for the general native community. The exploitation of mineral rights furnishes a novel type of revenue which native authorities have shown themselves ill fitted to regulate. As was remarked in dealing with surface land rights,² subsequent legislation regulating forms of concession, methods of prospection, and the like have failed to recover a control which might have been exercised without difficulty and to better purpose under an initial assumption of state ownership.

(d) Prospecting in Native Lands

The Union of South Africa by Act 18 of 1936 prohibits prospecting on land in respect of which the Native Trust or a native is the owner of mineral rights, without the written permission of the Minister, and if the land is proclaimed a public digging the Trust must impose conditions necessary to preserve surface rights to the native occupiers. In Bechuanaland the reserves are closed to prospecting unless the Mining Proclamation has been applied to them, in which case prospecting is allowed under mineral concessions granted by the tribe, with approval from the Secretary of State, or by virtue of a Crown grant issued with the owner's consent. In Basutoland no prospecting is allowed. No special authority is required for prospecting in the reserves of Southern Rhodesia. In Northern Rhodesia, Barotseland is closed to prospecting and the areas occupied by native villages elsewhere are excluded. Unless government specifically closes an area native lands are open to prospectors in Nyasaland, Uganda (except the Mailo lands in Buganda), Tanganyika, and Kenya; in Kenya, however, the consent of the Native Lands Trust Board is required

¹ See Chap. XII, pp. 775-7.

² *Ibid.*, pp. 776-7.

for prospecting in the reserves. In Nigeria, Sierra Leone, and the Northern Territories of the Gold Coast, land under cultivation may not be prospected without the owner's permission; otherwise native lands are open to prospecting, subject to the Governor's right to exclude any area. In the Katanga region of the Belgian Congo special authorization is necessary for prospecting on land in native occupation, and native mining workings in the Belgian Congo and in Ruanda-Urundi are protected.¹ In the French colonies natives retain the sole right to exploit minerals in areas where they have traditionally engaged in mining; these areas were delimited by an *arrêté* of October 1924, and have been extended by the Decree of December 23, 1934, to include deposits which natives have worked continuously for fifteen years.

(e) *Regulations Regarding Prospecting and Mining*

Some indications have already been given, in particular when dealing with conditions in Southern Rhodesia and Kenya, of the different views which have been expressed, sometimes in a controversial form, regarding the respective merits of the small prospector-miner and the large organization, more especially in the exploitation of gold. Here also the choice of policy has seldom been deliberate; it has been dictated partly by historical developments, as for instance in the Gold Coast Colony, under the system by which the native authorities were left with the right of making their own concessions; it has in other cases been determined by the pressure of political requirements, such as the support of a poor white population in the Union or the needs of the farmer-prospectors in Kenya and Southern Rhodesia during the depression period.

South Africa. The history of mining in South Africa affords much evidence of the varied influences which have determined state policy in regard to mineral development. Under the early Transvaal statutes, which curtailed the right to minerals held to attach to the owner of land under Roman-Dutch law, and established the claim of the state to precious minerals,² when ground was proclaimed open for prospecting, the owner and discoverer first received a specified area, and any one member of the general public

¹ Decrees of 1888, 1893, and 1937.

² See above, p. 1518.

could then peg up to fifty claims of 150 by 400 feet. It was soon recognized that this limit retarded development, for the area did not justify the expenditure necessary for efficient working, unless it contained unusually high-grade reef. The amalgamation of blocks into a mineable area involved protracted negotiations, the 'freezing-out' of weak holders, and often the over-capitalization of companies. It was felt that, in order both to avoid the difficulties of the pegging system and to benefit the general revenues, the state itself should act as vendor. The Transvaal Gold Law, Act 35 of 1908, gave the government power to establish state mines, or to lease any proclaimed land, as well as to throw it open for pegging. If it decided to lease, the area was divided into a number of claims, each constituting a workable proposition, and claims were allotted by a Mining Leases Board. Applicants for exclusive mining leases were required to agree to provide adequate capital, and to pay a percentage of profit to the state in addition to licence fees and taxation. The 1918 statute further permitted the Mining Leases Board to lease, without calling for tenders, undermining rights of small areas which could be exploited profitably only by adjoining companies. By 1936 206 leases had been granted over a total of 79,798 claims, of which 48 were disposed of to 24 companies on a basis of sharing in profits, 132 were sold for cash, the aggregate amount received being £422,445, and 26 were sold for annuities over a term of years, or for payments on a royalty basis, the total revenue from these sources being £43,556,232 up to December 31, 1936. The share of profits received by government is either a fixed proportion ranging as widely as from 1·4 to 10·8 per cent. or, more commonly, it varies with the ratio of profit to gold recovery on a sliding scale so calculated that the company obtains fixed proportions of reductions in costs and of increases in recovery.

The law was again amended in 1934 in order to attract capital for the opening of new deep-level mines. In the past the owner of the mineral rights in a proclaimed private farm was entitled to select an area, called a mynpacht, not exceeding in the aggregate more than one-fifth of the proclaimed land, and further adjoining areas could be leased. The amending statute of 1934 extended the mynpacht to one-quarter of the mineralized area, with leave to

apply to the Mining Leases Board for the undermining lease of a contiguous area in which, if granted, the government has a share of any profits obtained in addition to taxation; the Act aimed at making it impossible for the owner to select a mynpacht which is not, in the opinion of the Mining Leases Board, a workable mining proposition. The Act guards against the indefinite holding up of mineral areas. The Board may grant a prospecting and mining lease to the owner of mineral rights in private lands who intends to prospect, if it is satisfied that considerable expenditure will be needed to prove the existence of precious metals. Should the owner fail to prospect after notice has been served upon him, the Minister may transfer the lease, in which case the consideration payable for the lease must include a rental that goes to the owner of the mineral rights.

These amendments favour operations by highly capitalized ventures, but South African mining legislation still contemplates developments by small workers. In the Cape the discoverer of minerals may select fifty claims in blocks of a basic size each 150 by 800 feet, but varying in area according as the deposit is of precious metals or base metals. After an area has been proclaimed a public diggings and the discoverer, landowner, and other prospectors have registered their claims, any person may peg up to five claims. The Natal and Transvaal statutes allow prospectors a similar privilege, with local variations as to the size and number of claims, which can be pegged at a rental of 6*d.* per month for a base-metal claim after the first year.

Bechuanaland and Swaziland. While in the Union mineral rights have been directly or indirectly derived from the state, historical developments have in the High Commission Territories led to the recognition of a number of large-scale concessions originally obtained from chiefs. It is of interest to note the extent to which these have been developed. In Bechuanaland mining in modern times has been confined to the Tati District, where the Tati Company derives its rights from a concession obtained from Lobengula in 1887, and confirmed by Proclamation 2 of 1911, but a large area remained unexplored until after 1932, when prospecting was stimulated by the gold premium and special facilities were offered by the Company to the small prospector. In the rest of the protec-

torate the British South Africa, Balkis, and Linchwe Concession Companies hold mineral concessions from chiefs over extensive areas, in which development was suspended pending the discussion of legislation to safeguard native interests, until the promulgation of the Mines and Minerals Proclamation, 1932. This empowered the High Commissioner, with the consent of the owner, to declare any area outside the Tati District open to prospecting, but reserved to the holder of a registered concession the sale of prospecting rights for not more than twenty-five years from the date on which the Proclamation was applied to the concession area. There are said to be difficulties in opening Crown lands to prospecting owing to the preferential but not exclusive right of the British South Africa Company. This Company owns mineral rights in the Tuli and Gaberones blocks, and the Victoria Prospecting Company has lately prospected in the Bakwena and Bamangwata reserves on its behalf.

In Swaziland mineral concessions were granted by the native rulers between 1880 and 1889 over an aggregate area of 6,000 square miles, the Crown retaining the mineral rights in the remaining 684 square miles. The existence of these concessions militated against independent prospecting; it was stated by Sir Alan Pim¹ in 1932 that 'the mining houses who hold the mineral concessions are disinclined to take new risks in distant areas when their capital is required for the expansion of already developed mines'. Proclamation 33 of 1921 imposed an annual tax of 5s. per 100 morgen upon property not adequately exploited. The concession-holders petitioned against the tax, which was never enforced, but a commission² set up in 1924 considered that some provision should be made for the throwing open of concession areas to prospecting. The Mineral Concession Areas Proclamation of 1927 gave concessionaires the choice between carrying on development themselves, paying a tax of 5s. per 100 morgen, or opening their property to prospectors. Of 3,728 square miles covered by 28 concessions, 1,629 were being developed by the holders in 1932, and 2,099 had been thrown open. In the area in which the

¹ *Report of the Commission on the Financial and Economic Situation of Swaziland*, Cmd. 4114, 1932, para. 15.

² *Report of the Swaziland Mineral Development Commission*, *Union of South Africa Government Gazette*, 1201, 1924.

Crown has retained the mineral rights, 564 square miles have been declared open for prospecting.

East Africa. The conditions in the Rhodesias have been referred to on pages 1493 and 1495. The British East African territories make alternative provision for the small prospector, who, if he finds minerals, can claim an exclusive right in a restricted area, and for the large organization by means of the 'exclusive prospecting licence' which gives sole rights over an area extending in Uganda, Tanganyika, and Kenya to eight square miles, which may be increased at the discretion of the administration.

Nigeria. In Nigeria legislation affecting minerals¹ allows for the grant of prospecting rights lasting for a year only, and for licences allowing prospecting in areas not exceeding eight square miles in respect of metalliferous metals and two square miles in the case of precious metals. Mining leases may be granted to the holders of either of these for a term not exceeding twenty-one years and may be renewed for a similar period; the maximum area for a lode lease is fifty acres and for an alluvial lease eight hundred acres. Yearly mining rights to alluvial grounds may be granted in cases which do not justify a lease. There is no limit to the number of rights or leases that may be held by one person or company.

Gold Coast. In the Northern Territories of the Gold Coast mining rights are reserved to the state,² and their disposal is governed by an ordinance closely resembling the British East African statutes; in Ashanti and the Colony, however, they are vested in the native landowners who, in the former, are bound by regulations under which options are prohibited and concessions supervised by the government, whereas in the Colony owners may issue concessions without reference to the administration. The results of this system deserve to be discussed in detail. No limitations as to area and duration were imposed upon concessions obtained before 1895, but the Ordinance of 1900 restricted the area in the case of gold mining to five square miles and debarred any one person from holding concessions over more than twenty square miles. In the succeeding two years over 3,600 concessions were granted, in some cases rights over the same land being given

¹ *Laus*, cap. 93; and Minerals (Amendment) Ordinance, 9 of 1927.

² See Chap. XII, p. 779.

to different companies. Many were abandoned when the gold boom collapsed in 1902, but the absence of control has up to the present resulted in much confusion and litigation.¹ Nor were the terms of the concessions favourable to the native communities, whose receipts were limited to a fixed rental at a low figure, however successful the enterprise became. The maximum seldom exceeded £300 to £400 a year; in the eastern part of the Colony the usual payment was £50 consideration money for a five-mile concession of ninety-nine years' duration, and a mining rent of £100 to £250 per annum when production began; while in other parts it was customary to give consideration money of from £50 to £100 and a rental of £200 for 1,000 square fathoms. The profits of some companies increased substantially without benefiting the surface owners, and the right of those owners to a more elastic system has been acknowledged by the Concessions Court. The Court now requires that the lessor shall have the option of a mining lease together with a proportion, usually $2\frac{1}{2}$ per cent., of the net profits in lieu of the rents.

Sierra Leone. The mining laws of Sierra Leone resemble those of the Northern Territories of the Gold Coast; exclusive prospecting licences are granted and mining lease or right titles are issued. In 1934 the Consolidated African Selection Trust obtained from government a monopoly in the exploitation of diamonds in Sierra Leone for a period of ninety-nine years. The Company pays an annual rental of £7,000 and is exempted from other taxation except for the $27\frac{1}{2}$ per cent. of net profits, surface rent, and compensation to landowners payable under the Minerals Ordinance of 1927. It may not without government sanction enter into any agreement for the control of output or restriction of marketing of diamonds produced under licence.

French Territories. As we have seen, the state has retained mineral rights and has made special provision to safeguard native customary mining rights. It is of interest to note, in addition, that in the case of companies the law stipulates that three-fourths of the directorate must be of French nationality. The holder of a *permis d'exploration* may be granted a *permis de recherche* which confers exclusive prospecting rights over an area of five to ten square

¹ See Chap. XII, pp. 776-7.

kilometres and is valid for two years, renewable up to six years, the second renewal being granted only if at least 20,000 francs have been spent on prospecting in the previous four years. The holder of a *permis de recherche* who proves the existence of a deposit within his prospecting area may obtain over the latter a *permis d'exploitation* valid for four years, renewable up to twenty years subject to the carrying out of mining operations. The holder of a *permis de recherche* or *permis d'exploitation* may be granted a concession for seventy-five years with the right to renew for a further twenty-five years at an annual rental of 0.50 francs per hectare for the first six years and 5 francs thereafter.

Belgian Congo and Portuguese Territories. As will have been seen, in the Belgian Congo practically all exploitation has been in the hands of large concessionaire organizations. In Portuguese East Africa the Moçambique and Zambesi Companies each have their own mining laws applicable to the territories administered by them. In the district of Lourenço Marques the Lisbon Government has granted large concessions restricted by law to Portuguese subjects or companies. The most important mining area in the territory is Manica which is worked under concessions from the Moçambique Company. In Angola the *Companhia de Diamantes de Angola*, as has been mentioned,¹ holds exclusive prospecting rights for diamonds for thirty-five years throughout most of the colony and the monopoly of exploitation of all minerals discovered for an indefinite period.

Looking to the facts thus presented it is not easy to draw anything in the nature of a general conclusion as to the respective merits of the alternative agencies in development. Many of the individual prospectors have been men without scientific training who, even if they acquired by experience a rudimentary knowledge of geology, nevertheless depended largely on chance finds. Directing their attention to one or two minerals they frequently missed other valuable deposits. Their efforts were desultory, depending upon economic booms and depressions; and as the nature of the survey carried out by them was rarely recorded for the benefit of others, the same ground has repeatedly been covered

¹ See above, p. 1515.

with a proportionate loss of time and energy. Yet their initiative and persistence have frequently succeeded in revealing the existence of rich deposits and prepared the way for exploitation by a larger concern, itself unwilling to embark on prospecting. The value of the small prospector has been recognized in America, where the State of Nevada instituted in 1933 a system of 'itinerant prospectors' schools' for instructing prospectors in the field and assisting them with equipment. In Africa it is only in Southern Rhodesia and to a minor extent in Tanganyika that the small prospector has received definite assistance from the state.¹

The larger organizations, for their part, have not always had a clear record. If the exploitation of such areas as Katanga, Kilo-Moto, or the Rhodesian copperbelt has been effected by large-scale effort, scientifically planned and systematically pursued, there are other instances, as this study will have shown, where large concessions have for long been left undeveloped. In many cases a search undertaken when money was cheap or metal prices were high has been abandoned when economic conditions became less favourable. The progress of mining in the French colonies, in particular, has been retarded by half-hearted efforts on the part of concessionaires. It has usually been accepted that part of the utility of large-scale concessions lies in the fact that they lead to the collection of information from a large area. But even where their agreements oblige them to disclose such information (as in Kenya and Tanganyika) it is frequently the case that their energies are devoted to the discovery of one or two selected minerals, while other resources are neglected.²

(f) *Revenue and Taxation*

The financial relations between governments and the mineral industry are distinguished by a special feature in that the state, where it has assumed ownership of mineral rights, can, in addition to ordinary taxation, claim a share of the proceeds, representing

¹ See, for example, *Report to the League of Nations on Tanganyika Territory*, 1937, p. 156.

² Sir A. Kitson, *Presidential Address to the Geological Section of the British Association*, 1929. See also S. H. Frankel, *op. cit.*, chap. v, sect. ii.

the public interest in the asset on which the industry is drawing. There are, however, factors which set a limit to the amount at which the state can assess this interest. Mineral exploitation is so important an element in general development that it is impolitic to do anything which would check the flow of new capital into the industry. The speculative element in mining and the heavy outlay required for certain ventures such as deep-reef gold mining¹ or a large copper concern, combined with the fact that the asset often has a terminable life, justifies a return to the investor on a higher scale than that of ordinary commercial profit. Further, the interests of the community demand that the deposits should be thoroughly worked and the maximum amount of low-grade ore extracted, while a heavy demand by the state may lead to the use only of the richer ores. The royalty must therefore be considered only as part of the general tax on the industry.

In examining the methods by which royalty is taken it must be noted that in certain areas it is not available to the state, as for instance in Northern Rhodesia, or the older concessions held in the South African protectorates, or in the Mailo lands of Buganda. In the Belgian Congo the state has usually preferred the method of retaining a share in the profits of the enterprise; the details given of the capitalization of the Kilo-Moto Mines will illustrate the system adopted. It is held that under this system the enterprise is not burdened at the outset with fixed charges, and that state control of labour and welfare conditions can be better exercised through representation on the directorate than by supervision from outside. It is not difficult to conceive of circumstances in which the holding by the state of a large share in an industrial enterprise might prejudice its discharge of its duty to labour or other native interests; but these circumstances could not be held to apply to the Belgian Government of to-day in the same measure as they applied in the days of the Congo Free State.

In areas where royalty is taken some variety of form prevails. One method is to levy a fixed sum per unit of production. Thus, the rate on coal is 3*d.* per ton in Bechuanaland, 6*d.* in Southern Rhodesia, and 30 cents in Uganda and Tanganyika. More frequently the royalty consists of a fixed proportion of the gross value

¹ See above, p. 1488.

of the output. On base minerals the rate is 2 or 3 per cent. in Southern Rhodesia, from 1 to 4 per cent. in South-West Africa, and 5 per cent. in Tanganyika and Uganda. A third form is the sliding scale, adjusted to the value of the mineral. The amount payable on tin in Nigeria, Tanganyika, and Uganda ranges from 2 to 10 per cent. of the value, the maximum being payable when the price is £300 or more per ton. In Northern Rhodesia the royalty taken by the British South Africa Company on copper advances from 2 per cent. of the price when it is less than £55 to 5 per cent. of the price when it is £80 or more, plus 10 per cent. of the portion of the price exceeding £80. On gold the royalty is usually a percentage of value: thus, in the British East African territories and the Gold Coast it is 5 per cent. of the gross sum realized; in Nigeria 6 per cent.; in Sierra Leone 9 per cent. of the market price; in South-West Africa 10 per cent.; and in Southern Rhodesia, in the case of reef or placer deposit claims, $2\frac{1}{2}$ per cent. where the gross value (less refining and similar charges) is not more than £3,000 a month, and 5 per cent. when it exceeds that amount.

(g) *Tax on Profits*

Although a flat rate in one or other form has the advantage of simplicity, it is open to the objection that a light tax enables the richer mines to contribute less to revenue than they can afford, while a heavy tax discourages the opening of small properties or the working of low-grade ore. The Southern Rhodesian Government has attempted to solve the problem by exempting small outputs from royalty, which is not payable on precious and base mineral products which in any one month fall below £200 in value. On iron ore in Sierra Leone 5 per cent. of the assessable profits is payable. The rate on diamonds is 5 per cent. of net profits and an export duty of $6\frac{1}{4}$ per cent. in the Gold Coast, $27\frac{1}{2}$ per cent. of net profits in Sierra Leone, and 60 per cent. of the gross proceeds less 70 per cent. of the approved working costs, together with 10 per cent. export duty, in South-West Africa.¹ Katanga has a unique system by which the royalty is based upon the ratio between profits and capital. The rate increases from

¹ Diamonds Tax Proclamation 29 of 1931.

12 per cent. of profits when the proportion is 7 per cent., to 60 per cent. if the ratio exceeds 35 per cent.¹

The importance of gold mining in South Africa's economic structure has caused the government to devote unusual attention to the question of taxation. All royalties have been replaced by taxes on profits as prescribed in the Income Tax Act, 1925, and the Union has adopted what is perhaps the most satisfactory method of taxation, a formula under which the state receives a share, in some instances exceeding 50 per cent., based upon the ratio of profits to recovery. Any attempt on the part of the mine to vary the ratio to its advantage, as by milling unpayable rock, would inflict losses upon the mine itself. The principle was first applied to state mining leases but was made general for all gold mines in 1933 as a solution to problems created by the abandonment of the gold standard. The Low-Grade Ore Commission of 1930² had reported that 'the mines making small or no profits form so large a proportion of the total gold-mining industry that it has become a matter of vital concern to the country to adopt such measures as will ensure for as long a period as possible the continuance of their operations and bring into commission largely increased quantities of low-grade ore'. The greater cost of low-depth mining, on which seemed to depend the further expansion of the industry at the then existing range of gold prices, pointed to a grave reduction in activities. Calculations of future productivity varied: according to some estimates made in 1927 the crushing capacity would be reduced after five years by 14 per cent., rising after fifteen years to 79 per cent., when the total tonnage of rock for crushing would be 327,000,000.

The Commission considered that a reduction of 2s. per ton in working costs would bring into the class of payable ore sufficient new ground to extend the life of the mines by 50 per cent. Though the operation of the group system has considerably reduced costs, the eventual extension of the payable area was ensured not by a fall in costs but by depreciation in the value of South African currency. Old mines were reopened, and development was pressed forward over a wide area, particularly on the East Rand, but also

¹ Extended by a decree of 1937 to all future concessions in the Belgian Congo and Ruanda-Urundi.

² *Report*, U.G. 16, 1932, para. 26.

in other gold-bearing districts of the Transvaal. Though the average yield of gold per ton milled on the Rand fell from 6.33 dwt. in 1932 to 4.57 in 1935, and the total output dropped by 974,000 fine ounces, its value increased by nearly £24,000,000. The government considered the increase to be of the nature of a windfall, and announced that it would take 50 per cent. of the 'excess profits', but no greater proportion, until March 1938. The Excess Profits Duty Act, 1933, imposed a tax upon the difference between actual profits and a 'standard profit' which would have been earned if gold had remained at 85s. An allowance was made for reductions in the grade of ore milled.

In 1935 the Gold Profits Surtax Act imposed a tax on gold-mining profits over £10,000, which, together with the excess profits duty and income tax, might not exceed 50 per cent. of the excess profits. The working of the system was examined in 1935 by a committee, which found that the tax had strengthened the incentive to mine low-grade ore which had been provided by the rising price of gold, but pointed to the danger that, by increasing the amount of ore milled, in order to reduce taxation, the mines might lower their standards of efficiency. It recommended a basic tax at a flat rate, and a surtax leviable under a formula which would graduate liability according to the ratio of profit to the value of gold recovered. This double form of taxation would, in its view, bring to revenue an adequate proportion of profits earned and also stimulate the mining of marginal ore. As a result of these proposals, and in recognition of the fact that the 'standard price' of gold has now only an historical significance, the principle of taxing excess profits has been abandoned. Act 34 of 1936 reduced the normal tax on profits to 3s. in the pound and introduced a graduated rate with a maximum of 35 per cent. determined by a formula which depends upon the percentage ratio of profits to gold recovered, and becomes effective when the ratio is $12\frac{1}{2}$ per cent. and upwards, but with a diminishing abatement of £20,000. Whilst the tax will not reduce the burden on the industry as a whole, its incidence is considered to be more equitable and has the additional advantage of being easily calculable. The framing of a tax policy to encourage the mining of low-grade ore has been inspired by a desire to keep the mines working as long as possible.

V. LINES OF FUTURE DEVELOPMENT

The facts given in the course of this chapter make it possible to estimate the extent to which the development of the mining industry has influenced the economic history of different territories. Directly or indirectly, it has been of the first importance to the Union, the Rhodesias, and the Congo. Though important in the Gold Coast, it has there shared its position with native products, such as cocoa or palm oil; it is only of recent years that mining has formed an element in the economy of Kenya, Tanganyika, or Nigeria; it is still a feature of relatively minor importance in Nyasaland, Uganda, French West and French Equatorial Africa, or the French and British mandated territories in West Africa. In the past the main factors which have influenced the development of mining have been the relative abundance and availability of the metals for recovery, the cost of transportation to the consuming centres, and the cost of labour. The development of the railway system has largely followed the lines of mineral exploitation,¹ and existing mining areas are, on the whole, adequately served, but the great distance of haulage from the interior to the shipping ports will, in a large number of cases, continue in some measure to affect the prospects of expansion. Much of mining development is based upon the assumption that native wage rates will be stabilized at the existing low level, and here, though the wage factor will no doubt be materially affected by the increase in the standard of living or productivity of the native cultivation, Africa will no doubt be able for some years to count on a relatively cheap supply of labour. The expansion in the growth of commercial crops is likely to be offset by an increasing stimulus to wage earning, following on the improvement in social and material conditions in Africa, and on the increase in the numbers of the population.

The minerals have for the most part been exploited in an order that conforms to a scale of values which has prevailed in world markets for several hundred years, namely, first precious metals and stones, and then successively tin, copper, lead, zinc, and iron. In most territories the industry is still largely in the first

¹ See Chap. XXIII, p. 1565.

stage. Reference has been made to the reasons for the relative neglect of base minerals. It can hardly be doubted, however, that the further industrialization of Africa will provide both incentive and opportunity for the mining of the cheaper minerals. The Union of South Africa may be regarded as being on the threshold of this stage. We may expect also more precise geographical definitions of potentially mineralized fields and, as the possibilities of making new finds decrease, a greater intensity in exploring the known mineral regions. Until investigation has reached a more complete stage it would be premature to form an opinion of the extent of Africa's mineral resources. In South Africa, which has been the subject of closer study than other parts of the continent, the government Mining Engineer has recently estimated that the gold, diamond, and platinum wealth below the surface which can be economically extracted is at least twice the amount produced in the last sixty years, and that the value of base minerals should be assessed at not less than £33,000,000,000, or ten times the value of the precious metals. He pointed out that this wealth will be released only under favourable market conditions over a period of many decades, possibly of many centuries. Experience may, on the other hand, eventually show that the Union is no richer in minerals than some of the other territories; there are large areas, notably in the French colonies, which have received little systematic attention from geological surveys.

In most territories the metal industry may be regarded as being in its initial stages from another aspect. Experience in countries with a long history of mineral production has shown that in its infancy crude ore is usually exported, but, as the number of mining operations increases, smelting and refining plants are established internally to treat domestic ore, and eventually ore imported from less industrialized regions. In South Africa the Rand Refinery, Limited, created in 1920 as a private company by the companies belonging to the Chamber of Mines, refines the gold bullion of the Union and also of Rhodesia. Smelting works were erected in Natal in 1912 to work up iron and steel scrap from the mines, but the production of pig iron from South African ore began only in 1926. To develop the industry the government found it necessary to constitute, under state control, the South Africa Iron and Steel

Industrial Corporation, Limited,¹ with a capital of £6,000,000, the major portion of which has been subscribed by the state and the Public Debt Commissioners. The plant commenced operations in 1934 and produces annually about 200,000 tons of ingots, from which approximately 180,000 tons of finished steel products are obtained.

Apart from the Union the only territories with refining and smelting works are Northern Rhodesia and the Belgian Congo. Here the copper ores are crushed, concentrated, and smelted in plants that were erected when production commenced. The bulk of the metal is exported in the form of blister copper, but each territory has an electrolytic refinery. Zinc is refined in Northern Rhodesia, while vanadium is shipped as a concentrate. The reef gold produced in the Belgian Congo is refined in a flotation plant on the Nizi river, tin is smelted in the Katanga, and uranium is exported to Oolen in Belgium, where radium is extracted. A plant for the treatment of refractory gold concentrates is under construction by the Southern Rhodesian Government at Que Que. It is possible that an expansion of the mining industry in other regions will effect a similar process of industrialization, which may diminish the predominance of agriculture that now characterizes the economy of most territories. The immediate need would appear to be a thorough study of resources, which will necessitate a more systematic policy in regard to geological survey than many governments have hitherto adopted.

¹ See above, p. 1491.

CHAPTER XXIII

TRANSPORT AND COMMUNICATIONS

I. INTRODUCTION

THE economic and engineering problems of transport in tropical Africa have necessarily differed from those of countries with a long history of industrial development. In Europe the evolution of the transport system formed part of the transition to an industrialized economy; the process was therefore that of supplementing or displacing one form of transport by another, under the influence of new inventions and an expanding trade, and it served to connect existing towns and manufacturing centres with seaports by lines passing through well-populated areas. In other and less developed countries the growth of transport facilities has generally been aided by conditions more favourable than those which are found in many parts of Africa. The railways in India could rely upon a large passenger traffic, which from the first three years onwards has always yielded a greater return than the receipts from goods traffic;¹ in the United States an extensive network of waterways and roads had opened up large fertile areas for settlement, and a considerable local industry had been created before the beginnings of railway transport;² while in Canada and Australia the building of trans-continental lines was undertaken in the expectation of attracting to rich agricultural areas large numbers of European settlers whose activities would rapidly provide an adequate volume of remunerative traffic. In Africa it has not been possible to base the transport system upon a large internal crosswise traffic, and the first stage of development has been to provide means of conveying raw produce from the interior to the coast for export, and bringing manufactured imports back to the inland dweller. Not only, however, is the building of a main line running inland from the coast expensive in relation to earnings, because of the long distance to be covered and the sparseness of the population, but the further

¹ Horace Bell, *Railway Policy in India*, 1894, p. 4.

² W. M. W. Splawn, *Government Ownership and Operation of Railroads*, 1928, pp. 336-69.

development of connexion through branch lines and roads with surrounding districts is made uneconomic because African crops are frequently of small value, and available only in small quantities.

But transport has had a place which is not less significant in the human than in the commercial history of Africa. When the British Parliament voted in 1892 in favour of undertaking the survey of the Uganda Railway, it was primarily on the ground that the slave trade, hitherto attacked only on the coast, must be dealt with also in the interior.¹ The African Lakes Company, which introduced steamer transport on the East African lakes, was organized in order to help in the campaign against Arab slave dealers. But it is in their effect on the use of head portage that modern systems of transport have made the most impressive changes. In most parts of Southern Africa portage was rendered unnecessary by the use of ox wagons in cross-country transport, though in certain areas, as for instance between Lourenço Marques and Lydenburg in the 'seventies, the presence of tsetse fly led to the employment of native carriers. In the Kalahari and the Sudan the camel is the principal means of transport, and in Northern Nigeria and the Northern Territories of the Gold Coast camels, donkeys, ponies, and oxen have all been taken into use. But in most regions of tropical Africa, and more especially where the tsetse makes the maintenance of domestic animals impossible,² the native porter was the only means of transport. During the earlier days of European occupation large demands were made on the population for the supply of porters, with the inevitable result of much suffering and a large loss of life;³ and it is further clear that the extensive use of human portage was responsible for the spread of forms of disease which had hitherto been local in their incidence.⁴ No estimate can be formed of the demands thus made on the population. But, to take one example, we know that during the War the purchase of 4,200 tons of foodstuffs by the French Government involved the employment of 125,000 carriers.⁵ As late as 1924 the

¹ Cmd. 6560, 1892, p. i.

² See Chap. XIII, p. 929.

³ The death-rate among carriers during the War period was, of course, abnormal, but the average loss from death and desertion of carriers with the Congo troops between 1917 and 1918 is stated to have been 242 per thousand.

⁴ See Chap. XVII, pp. 1129 and 1200.

⁵ L. C. A. and C. M. Knowles, *The Economic Development of the British Overseas Empire*, 1924, vol. i, p. 144.

transport of government loads in Tanganyika accounted for 400,000 working days of the porters employed.¹ At every stage in the expansion of mechanical transport the use of head portage has declined, and it is not without reason that a Belgian writer has spoken of modern means of transport as 'un bienfait immense pour les populations désormais délivrées du fléau du portage'.² The possible scope for the future extension of railway facilities will be discussed at a later stage; but it may be said here that, from the point of view of the African native, the most pressing need at the moment appears to be the provision of forms of conveyance which will, in substitution for head portage, convey produce to the nearest market or railway at an economic rate. But it will be convenient at this stage to make a closer survey of the various transport systems now in operation.

II. HEAD PORTERAGE

The extent to which governments now use head portage for official or other purposes has been discussed in a previous chapter; it will be seen that policy has been consistently directed to reducing the element of compulsion in obtaining it.³ Recorded statistics of portage do not, however, include more than a small proportion of the total number actually engaged in head transport; if the use of the system by the administration has diminished, it is probable that the growth of commerce has in some parts led to an increase in the extent to which natives carry loads on their own account, and it is certain that in the tropical regions many thousands of tons of produce are still being transported by this means, often for great distances.⁴ It has been calculated that as many as 2,000 men are required to transport 100 tons of produce a month over a distance of 100 miles. A variety of calculations has been made in order to arrive at a formula which would enable comparison to be made of the cost of portage with that of other forms of transport. That mentioned by the Rt. Hon. W. Ormsby Gore in the report on his journey in West Africa in 1926 is interesting, though it

¹ *Report on Labour in the Tanganyika Territory*, Colonial 19, 1926, p. 37.

² *Angola*, Exposition Internationale D'Anvers, 1930, p. 13.

³ See Chap. XI, pp. 616-24.

⁴ See The Rt. Hon. W. G. A. Ormsby-Gore, 'Some African Problems', *Journal of the Royal Society of Arts*, vol. lxxiii, 1925, p. 803.

would not hold good in present conditions; he compared head portorage at 2s. 6d. with motor transport at 1s. 0d., camel transport at 9d. and 10d., and railway transport at 2d. a ton mile.¹ There are, of course, wide variations in cost, and cost moreover increases as the quantities carried increase, becoming prohibitive before they reach proportions substantially larger than the amount produced at present by native agriculture. Even head portorage undertaken by a native bringing his own produce to a collecting centre is limited in regard both to quantity and distance, for the human carrier, like the pack animal, must carry his foodstuffs in addition to his load. Moreover, apart from the question of cost, there is the grave objection that head portorage is more wasteful of labour than any other form of transport.

III. WATER TRANSPORT

(a) *Waterways of South, Central, and East Africa*

If head transport is the most costly, water is normally the cheapest means of transport. West Africa is more favoured in the matter of waterways than South and East Africa; but, generally speaking, Africa is unfortunate in the fact that no other continent has rivers so poor for navigation in proportion to their size.² The Union has no navigable river; the Limpopo is only navigable for about thirty miles from the mouth; the Zambesi has three navigable sections, but they are divided by impassable barriers; the rivers in Kenya and Tanganyika are impassable or can only be used by shallow-draught vessels. With the exception of the Nile and the Congo river systems, internal water transportation of any magnitude is confined to the great navigable lakes, Nyasa, Tanganyika, Victoria, Kivu, and Albert. The navigable rivers and the great lakes were fully used before the construction of railways. The opening of the line from Beira to Chindio in 1922 diverted much of the traffic which had passed along the Zambesi through Chinde, but produce from the estates on the river banks, estimated at about £250,000 yearly, and a part of the hinterland traffic from Tete is still sent down the river.³

¹ *Report on his Visit to West Africa during the Year 1926*, Cmd. 2744, 1926, p. 30.

² Sir Charles Lucas, *The Partition and Colonization of Africa*, 1922, p. 14.

³ *The South and East African Year Book*, 1937, p. 905.

The connexion now effected by means of the Zambesi Bridge with the Nyasaland railway system provides through rail communication from Beira up to Chipoka on Lake Nyasa,¹ and the proposed improvements of the steamer services of the lake may in effect extend the traffic highway for a further 300 miles into the heart of Central Africa. The first steam vessel on Lake Nyasa, or any African lake, was launched in 1875, being carried from the coast in 50-lb. loads by 800 porters; there is now a steamer which maintains a monthly round service and also a motor-driven boat. The improvement in communications has opened up southern Nyasaland, the considerable British and Portuguese areas surrounding the lake, the Lilongwe District of Nyasaland, and the Fort Jameson District of north-eastern Rhodesia, and has established conditions under which crops other than tobacco can be grown for export.²

Lake Tanganyika, which measures 450 miles in length, serves a considerable tract of country, but the volume of traffic is relatively small. The Tanganyika administration operates a small passenger launch and a steamer on a fortnightly service from Kigoma to Albertville, the main lake port for the Belgian Congo;³ the lake is also connected by motor road with Abercorn in Northern Rhodesia. The Belgian Great Lakes Company also runs a weekly service between Albertville and Kigoma, and maintains regular communications with other ports, notably Usambara in Ruanda-Urundi and Uvira in the extreme north. The volume of traffic passing in and out of Kigoma has declined since the opening of the Lobito Bay Railway, which now takes part of the copper from Katanga to the West Coast, a more convenient route than that to Dar-es-Salaam, over which goods have to be transhipped at four points. The anticipated completion of the Belgian railway between Uvira and Costermanville on Lake Kivu will, however, tap rich areas in Ruanda and Urundi and add to the traffic on the lake. In view of this anticipated increase in traffic Brigadier-General Hammond recommended⁴ in 1930 that the steamer service should be augmented and the harbour facilities at

¹ See below, pp. 1576-8.

² *The Trans-Zambesia Railway Company Ltd., Report of General Meeting, 1934*, pp. 5, 6.

³ For Belgian connexions with Albertville, see below, pp. 1591-2.

⁴ *Report on the Railway System of Tanganyika Territory, 1930*, p. 73.

Kigoma improved. Lake Kivu, which is 62 miles long, has a passenger steamer operating in conjunction with the vessels on Lake Tanganyika. Farther west lies Lake Victoria, the largest and, from a commercial point of view, the most important of the great lakes, with a coast line of over 4,000 miles. The first steam launch, brought to the lake in segments by native carriers, was wrecked in launching in 1895; in the following year another vessel was floated, and there are now two steamers of about 1,100 tons and a number of smaller boats, which are operated by the Kenya-Uganda Railway administration; in addition numerous dhows maintain irregular communication between the lake ports. Mwanza Harbour, the terminus of the Tabora-Mwanza branch of the Tanganyika Central Railway, is linked by a weekly service with other points on the lake and has now a large export of cotton. Musoma on the east side serves the adjacent gold-mining districts; Bukoba on the west is the main port for large native coffee plantations; Kabwera to the north is the port of entry for the traffic along the Kagera river, up which a service operates for 97 miles to Nya Kanyasi. The extension of the Uganda Railway from Kisumu to Kampala has had the effect of diminishing traffic on the northern section of the lake; the tonnage carried declined from 140,636 tons in 1929 to 81,125 in 1936.¹ Again, the extension of the railway to Mwanza has caused a certain amount of competition for lake traffic between the Tanganyika and the Kenya-Uganda Railways, to which further reference will be made.² Lakes Kioga and Kwanja in Uganda are not suited for navigation by heavy vessels, being covered with *sudd*; nevertheless, they provide the chief means of communication for a large area, and the administration maintains on them three small steamers and a number of lighters. These lakes provide a link between Atura on the Victoria Nile, which is navigable up to Masindi Port, and Namasagali, which is connected by rail with the main Uganda line, and with Jinja, the northernmost port on Lake Victoria.

The other important waterway in East Africa is Lake Albert, where three steamers and a motor launch operate a total route of 830 miles under the control of the Kenya-Uganda Railway ad-

¹ *The South and East African Year Book*, 1938, p. 800.

² See below, pp. 1579-81.

ministration, which took over from the Protectorate Government in 1924. A service runs between Butiaba on the eastern shore to Kanyonza in the Belgian Congo, which is connected with the gold mines at Kilo-Moto by the Belgian Congo motor transport system; to the north another service operates from Butiaba along the Albert Nile to Nimule, on the Sudan frontier; this route is continued by a motor road to Juba, after which the Nile is navigable to Khartoum. On the south the river Semliki connects Lake Albert to Lake Edward, which in turn is connected by a channel to Lake George; but this line of communication is used chiefly by native fishing-craft and boats carrying salt.¹

(b) *The British West African Waterways*

Of the British West African colonies the Gambia alone has no railway, and relies for transport on its river, which is navigable for about 150 miles by ocean-going steamers, and for a further 140 miles by vessels drawing less than two fathoms. Two small government steamers also maintain a regular service between the numerous ports in the protectorate. The Gambia provides a natural ocean gateway for the neighbouring French territory, but the flow of Senegal trade through Bathurst has declined since the completion of the railway to Kayes.² In Sierra Leone the lower reaches of all the rivers are navigable for light boats, and traffic by these means is considerable. In the Gold Coast shallow-draught launches carry a large traffic on the Volta river between the mouth at Ada and Akuse, a distance of 65 miles; between December and August canoes navigate the river as far as Tamale Port except over the Krachi Rapids, where a mile of tramway has been built for canoe portorage. The lower Volta is an outlet for a small part of the produce from the Eastern Province, which is carried in shallow-draught launches or canoes; palm oil, however, is generally conveyed in barrels, which are made up into rafts and travel down the river to Ada. A private company has a regular mail and passenger service between Ada and Amedica. The next river of importance is the Tano, which is navigated by light-draught launches for 50 miles from the mouth to Tanosu, for about eight

¹ For a description of the craft see S. and E. B. Worthington, *Inland Waters of Africa*, 1933, pp. 153-66.

² See below, p. 1588.

months of the year. The Ankobra is an important highway to the timber districts of Axim and Wiawso and to the gold mines in the former; it is, however, navigable only by light boats, and only for nine months of the year.

~~Nigeria~~ has an extensive network of rivers and connecting creeks, which in parts of the Southern Provinces provide the only means of communication. Commercial interests maintain about 180 self-propelled craft, and much traffic is also carried by native canoes and large rafts. The upper Niger is navigable by shallow draught stern-wheelers as far as Jebba, which is 540 miles from the sea. A private company maintains a weekly mail-launch service between Burutu and Baro, a distance of 407 miles; it also undertakes, together with another company, the transport of passengers and cargo by steamer on the Niger and Benue rivers and in the creeks along the seaboard. The limitation of these services to two companies, and the absence of a carrier in common, have been suggested as reasons for the relatively slow development of the areas in the Southern Provinces, which depend mainly on water transport. The railway line from Kano to Baro was built to make the Niger accessible to regions in the north; the uncertainty of the river services, especially in the dry season, led to the building of the main line from Minna, 111 miles north of Baro, to Lagos, to which the bulk of the traffic now goes.¹ Private motor boats, however, still carry high-rated traffic from the coast to Baro, whence it goes by rail to Kano. During the months when the Niger is unnavigable above Lokoja, where it is joined by the Benue, the shipping companies transfer their craft to the latter river, which is then in flood and navigable up to the French Cameroons. The proposal to close the railway line from Baro to Minna, to which reference is made elsewhere,² would cut off a large part of the country from access to the Niger and curtail the steamer service to Baro, a result which, it is claimed, would prevent the companies from maintaining an adequate flotilla on the Benue. Such an eventuality would be serious for eastern Nigeria, which is dependent for its traffic on the waterway. Farther to the east, the Cross and Calabar rivers are used for transport; ocean steamers go as far as Calabar, 30 miles from the sea, and a mail

¹ See below, p. 1584.

² Ibid.

launch service is maintained between the port and stations on the Cross river, extending a distance of 200 miles to Ikom in the high water season. The Imo and Bonny rivers, with their respective ports of Opobo and Port Harcourt, are the natural outlets for the central Southern Provinces; the Marine Department maintains regular services on the creeks, and commercial firms also run small steam or motor craft in the creeks for trading purposes.

The British Cameroons are served on the western side by the Akwayafe, Meme, and Rio del Rey rivers, which afford a light-draught transport for distances of 30 to 45 miles; on the eastern side the Tiko river is navigable for ocean-going vessels up to the port of Tiko, some 20 miles from the sea.

(c) *The French Waterways*

In French West Africa the Senegal river was the chief means of access to the interior until the railway was built from Thiès, on the Dakar–St. Louis line, to Kayes; this line avoids the great detour made by the Senegal river and also connects with the railway to Bamako and Koulikoro on the Niger.¹ During August and September Kayes can be reached from St. Louis, a distance of about 900 km. by sea-going vessels of moderate size; in the dry months it is accessible only to light-draught stern-wheelers. The *Compagnie des Messageries Africaines* runs a fortnightly steamer service from St. Louis to a point varying according to the height of the waters; in the dry season they cannot pass beyond Podor, above which transport is supplied first by government stern-wheelers and, above Mafou, by barges.² Of the tributaries of the Senegal, the Falémé is the most important; it is navigable for small steamers between July and September for a distance of 170 km. from the junction. Midway between Dakar and Bathurst the Saloum, a tidal estuary, is navigable for 120 km. from the sea to Kaolack. To the south of the Gambia, the Casamance river is open to ships of considerable tonnage as far as Ziguinchor, and to lighter vessels up to 165 km. from the coast. The numerous rivers of French Guinea are made inaccessible to large vessels by rapids, but small craft can ascend some of the streams for a distance of 75 km. The rivers of the Ivory

¹ See below, p. 1588.

² *Le gouvernement général de l'Afrique occidentale française*, 1931, pp. 136–7.

Coast running from north to south form part of the Niger system, and are of little use as waterways; on the other hand, creeks extending along the seaboard from the Gold Coast for about 300 km. are valuable means of communication. In the south-east the creeks, covering an area of 1,000 sq. km., are used by small steamers; a regular service is maintained also for 115 km. from Grand-Bassam to Abidjan on the Ebrié, which is connected by a canal, constructed in 1923, to the Lahou Creek.¹ In Dahomey a large traffic is carried on in the creeks between Porto-Novo and Cotonou.

In the French Sudan water transport has been developed farther than in the other French colonies in West Africa.² The administration maintains a fleet of steamers and lighters on the Niger between Bamako and Kouroussa in French Guinea, and from Koulikoro, the terminus of the railway from Dakar, to Ansongo, a distance of 1,408 km. The tonnage carried between Bamako and Kouroussa declined considerably between 1925 and 1935, consequent upon the abandonment of measures to improve the navigation of the river, a work which according to various commissions of inquiry would entail considerable expenditure, and also on account of the extension of the Kayes-Niger Railway to Thiès.³ The introduction of special tariffs for the carrying of low-priced produce over the railway encouraged traffic to go by rail to Dakar, the shipping facilities of which are superior to those of Conakry, the sea outlet for the Niger region. On the other hand, traffic increased from 4,000,000 metric tons in 1920 to 14,000,000 tons in 1935 on the middle Niger between Koulikoro and Ansongo;⁴ this navigable reach of the Niger forms the logical continuation of the railway from Dakar, which has its terminus at Koulikoro, and it is indispensable in the economy of the Sudan. The stretch of 504 km. of river from Koulikoro to Mopti serves the rich area of which Segou is the centre; at Mopti the Niger is joined by the Bani, navigable for 645 km. to Pankourou, and passing through the productive district of San; above Mopti to Timbuktu, the Niger flows through a series of lakes in an important agricultural region. During the period of the winter rains, from July to January, the

¹ *Le gouvernement général de l'Afrique occidentale française*, 1931, p. 139.

² See *Premier congrès soudanais de technique et colonisation africaine*, 1936, vol. ii, pp. 232-47.

³ *Ibid.*, p. 245.

⁴ *Ibid.*, p. 235.

Niger is navigable for steamers; during the remaining months its navigable stretches are practically closed to all craft drawing more water than a barge. The flow of the river is regulated by a series of natural barrages, in the form of rapids between Bamako and Koulikoro, the lakes below Mopti, and sandbanks at Tosaye, 285 km. below Timbuktu. A noticeable extension during recent years of the low-water period has been attributed to either a widening of the channel at Tosaye or a reduction in the volume below Timbuktu, with a consequent limitation upon the action of the lakes as a regulator.¹ The administration has been working on the problem of restoring the flow to its former proportions by the construction of canals; steps have also been taken to improve the river craft by substituting mechanically propelled vessels for the barges, now used during the low-water season, which absorb a large body of native labour. There are obstacles in the prohibitive price of imported coal or oil, and the scarcity of wood fuel along the Niger; experiments are therefore being made with local fuels, such as vegetable oils.

(d) *The Congo Basin*

In a large part of the hinterland of French Equatorial Africa, together with the north-eastern Belgian Congo, the principal means of surface communication with the sea are the great river systems of the Congo.² Despite its 6,200 miles of navigable waterways, the Congo system has two drawbacks; the course of the Congo river to the sea is broken by the falls at Stanley pool, about 200 miles from the sea, so that access to a port is obtained by the Brazzaville-Pointe Noire Railway on the French side, and the Léopoldville-Matadi Railway on the Belgian. In the second place the middle and upper courses of the Congo and its tributaries are interrupted at critical points by rapids, so that a railway is necessary to carry traffic past the unnavigable passages. But for over 1,077 miles of the middle Congo, traffic by steamers up to 800 tons is possible, and steamers of the same size reach as far as Port Francqui on the Kasai, the principal left-bank affluent of the Congo; Port Francqui is the terminus of the Bas-Congo Katanga railway system which establishes connexion with Élisabethville and

¹ See Chap. XV, p. 1049.

² For a fuller description and map, see W. Fitzgerald, *Africa*, 1934, pp. 291-302.

the Katanga.¹ On the right bank two French companies operate services from Brazzaville to the farthest navigable point on the Ubangi river; the service provides an important administrative link between the sea and the interior of the Ubangi-Shari Provinces. It is of interest to note that the distance from Léopoldville to Stanleyville is nearly the same as that from Juba to Khartoum on the Nile;² but for most of the year the Congo is open to considerably larger craft than that section of the Nile. Free navigation on the Congo, as on other rivers within the conventional Congo basin, was guaranteed by the Berlin Act of 1885;³ in 1929 companies and individuals of different nationalities owned between them 151 steamers of from 15 to 800 tons, and 146 smaller boats.⁴ In the early stages of colonization the organization of river transport was undertaken by the *Marine du Haut Congo*, a department of the administration, which introduced the first steamer in 1881; but in 1919 its services were taken over by a company, formed for the purpose, which in 1925 amalgamated with another organization, and became the *Union Nationale des Transports Fluviaux* (*Unatra*), the only company organized solely for river transport. In 1929-30 the capacity of the Unatra fleet was 50,000 tons, while the volume of cargo carried was 203,172 tons.⁵ The great supply of cheap wood fuel along the upper Congo has made it the rule to use wood-burning steam-engines, although a number of the passenger boats have Diesel engines; it is noteworthy that during the economic depression the Diesel-driven vessels were the first to be laid up.⁶ Various companies besides the *Unatra* maintain fleets, mainly for the transport of their own produce, the most important of these being the *Société des Huileries du Congo Belge*, with a flotilla aggregating 7,400 tons in 1930. On the upper reaches, the *Compagnie des Chemins de fer du Congo* maintains a fleet of 8,300 tons for service from Ponthierville up the Lualaba, one of the headstreams of the Congo, and another of 4,500 tons on Lake Tanganyika.⁷

¹ See below, p. 1591.

² See above, p. 1543.

³ See Chap. XIX, p. 1341.

⁴ *L'organisation actuelle des transports au Congo belge*, Comité Permanent de Co-ordination des Transports au Congo, 1930, p. 25.

⁵ *Ibid.*, pp. 66-7.

⁶ Richard Hill, 'Nile and Congo: Comparisons in River Transport', *Journal of the Royal African Society*, vol. xxxix, April 1936, pp. 204-11.

⁷ *L'essor économique belge*, 1932, vol. ii, p. 451.

IV. ROADS

As in the case of railways, the principal obstacle to road construction in Africa is the sparseness of population and its low producing capacity; in addition, the torrential rains of the tropics are a serious complication, suitable material is often lacking, and a shortage of labour in many territories was in the earlier stages of construction made good only by the widespread exercise of compulsion. It may indeed be said that there are territories which owe the greater part of their road system to the use of compulsory labour in the past.¹ But the tracks that were constructed by District Officers in the first stage of occupation, largely with the aid of compulsory or 'communal' labour, became inadequate as commerce and intercourse expanded, and the need to provide more durable roads for motor traffic has involved the formation of technical departments, and a greatly increased scale of expenditure.

(a) *Union of South Africa and High Commission Territories*

In the Cape, road construction and maintenance was at first in the charge of the Landdrosts and Heemraden, who compiled rolls of Europeans liable for service on the roads; once a year the latter supplied their labour without payment, working under elected overseers, but substitute labour was also accepted. As may well be imagined, the service of the *corvée* was irregularly performed, and the roads ill maintained. There were in addition certain roads which were made by contractors, who as part payment received the right to collect tolls. As the settlers moved inland, they encountered the mountain barriers of the highlands; the farmers performed extraordinary feats in taking their ox-wagons over the Hottentot's Holland Mountains and other ranges, but at the expense of much damage to vehicles and not infrequently loss of life. A turnpike road was made through the Tulbagh Pass in 1807 with convict labour; the French Hoek Pass was constructed in 1824, and the Sir Lowry Pass followed in 1830, being designed to make the eastern districts directly accessible for heavy traffic, which formerly had made a detour to the north via Worcester.

¹ For the use of compulsory labour in road construction, see Chap. XI, pp. 613 ff.

Settlement in the Eastern Province and the growth in commerce made possible by the construction of passes, awakened a strong demand for better roads, and eventually the Central Road Board of 1843 was created, together with divisional road boards. The Central Board was charged to formulate a road policy, to be carried into effect with the aid of state grants, rates, and loans secured by revenue from tolls, and to manage the convict labour which had largely replaced the *corvée*. Between 1845 and 1853 convicts and English workers, introduced at government expense, completed the Montagu Pass, connecting the Little Karroo to George and the coast, Mitchell's Pass from the Bokkeveld to the main Capetown Road, and Bain's Kloof to the interior plateau, on which travelling was easier.¹ The Central Road Board, strongly criticized for over-centralization, was abolished in 1858; it had at the time some 1,650 miles of main road under its charge. The demand that the government should assume direct responsibility for roads was acceded to, but in 1864 policy swung back again, and their maintenance was placed under divisional councils, the intention being to revive the measure of local self-government which had existed under the Boards of Landdrost and Heemraden.

At present the upkeep and construction of roads, excluding those in urban areas, is a function of the provincial administrations; in Cape Province divisional councils receive subsidies from the Provincial Council for road maintenance; in Natal and the Transvaal the maintenance of government roads is purely departmental; in the Transvaal, proclaimed main and district roads are maintained by the Department and some attention is given to an extensive system of farm roads. There is, in consequence, a marked difference between the quality of the roads in different provinces. In 1936 the total mileage of maintained roads was 81,004, and the expenditure on maintenance and construction was £3,009,654, including grants from the National Road Board. This Board was created by the National Road Act of 1935 for the control of national routes throughout the Union, a National Road Fund being instituted at the same time. The Board does not undertake

¹ L. C. A. Knowles, *op. cit.*, vol. iii, pp. 256-7; *The Cambridge History of the British Empire*, vol. viii, 1936, p. 765; *Official Yearbook of the Union of South Africa*, No. 18, 1937, p. 16.

maintenance or construction, which remain provincial functions, but allocates funds for roads which are gazetted as being of national importance, and co-ordinates the work carried out in connexion with them. The funds are mostly derived from the customs tax on petrol and from an initial grant of £500,000 made by parliament. A five-year scheme of works to be undertaken contemplates the maintenance of over 5,000 miles of national roads; the expenditure over the five years is estimated at £11,157,094, of which the petrol tax is estimated to produce £6,000,000, leaving £4,000,000 to be borrowed. A Central Road Transportation Board, with local boards for proclaimed transportation areas, regulates the conditions of the road transport of persons and goods. Road transport has increased considerably in the last few years; in 1933 the total tonnage of goods carried was 554,618, in 1935 it was 1,137,378, and in the same period passengers carried increased from 55,000,000 to about 70,000,000. A large number of road motor-services are now run in conjunction with the state railways.

In South-West Africa two main roads run from within the Union to Luderitz, Walvis Bay, and the Angola border. Little recent road construction appears to have been done. Provision has been made for the election in each magisterial district of a Roads Board with power to levy rates; the government contributes two-thirds of the amount expended on proclaimed roads.

The greater part of Basutoland is mountainous, and pack animals are the usual means of transport. An investigation of the principal bridle paths is being carried out with a view to initiating a programme of construction. The main motor roads traverse the strip of agricultural country running from north to south, and feeder roads or tracks lead from these to the interior. There were in 1936 some 320 miles of gravel and 40 miles of earth main roads. In Bechuanaland a road follows the railway from north to south, about 400 miles, and there is also a road to Kazungula on the Zambesi river, which is an important route for the transport of native labour; the roads are of a low standard and are mostly earth or sand tracks. There are about 1,127 miles of road in Swaziland, only 257 miles of which are first grade. There is no railway in Swaziland, and the territory is served by the motor services of the South African Railways.

(b) Southern Rhodesia

Road councils with elected members have been established in Southern Rhodesia since 1924; they provide a limited degree of local government for rural areas, and closely resemble the divisional road boards of early Cape days. The trunk roads fall under the State Department of Public Works. Until about 1920 most of the roads were little more than veld tracks, passable for ox wagons and carts but not for motor cars, especially in the rainy season, but by 1930 the State Department had provided 6,000 miles of motor roads and the councils another 1,100 miles, while tracks classed as 'other roads' amounted to 2,500 miles.¹ An interesting feature of road construction in Southern Rhodesia is the use of asphalt strips laid on gravelled earth roads in order to provide all-weather tracks along the main roads; the administration aims at the improvement of most of the main roads by this means in the near future; some 1,289 miles had been so treated by 1937. Some further experience seems to be required as to the success of this system, as much appears to depend on the character of the foundation on which the strips are laid. An important factor in the improvement of communications has been the assistance given by the Beit Trust, which up to the end of 1934 had borne the cost of building 91 bridges out of a total of 231; those built by it include the Beit Bridge over the Limpopo, completed in 1929 at a cost of £125,000, and the Birchenough Bridge over the Sabi, at a cost of £128,000. The policy of the government is to take charge of the main road arteries, and to assist the road councils by granting a £ for £ subsidy, in addition to the wheel taxes collected in their areas. A Roads and Traffic Act controlling roads and road transport came into force in October 1936, giving authority to the government to establish road councils for the control of traffic. The improvement in the finances of the territory has given a stimulus to road construction, and a number of extensions are now being made; among the more important is a new road from the Bulawayo-Victoria Falls Road to open up the area of new tin fields.

¹ *Official Year Book of the Colony of Southern Rhodesia*, 1932, p. 448.

(c) Northern Rhodesia

In the absence of branch railways, Northern Rhodesia has had to depend largely on roads for the development of its internal communications. These are of earth, except for two short bitumen-surfaced roads at Lusaka and Livingstone; during the rainy season many roads become impassable and loading is restricted; even in dry weather the surface in many cases is very poor. The arterial system consists of three main routes:—the Great North Road, connecting the settled areas on the railway line with the Tanganyika system and with Lake Tanganyika, a length of 982 miles; the Congo Border Road traversing the copperbelt, and forming a link with the Congo roads, a length of 650 miles; and the Great East Road from Lusaka to Fort Jameson and thence into Nyasaland, a length of 392 miles. There are also some 5,000 miles of so-called secondary roads, but most of these are mere tracks. At present connexion with the Southern Rhodesia system is by an indifferent road from the Victoria Falls via Wankie Colliery to Bulawayo; the construction in the near future of a bridge over the Zambesi north of the Falls, at Chirundu, will afford more direct road connexion between Salisbury and Lusaka. Funds for the bridge are to be provided by the Beit Trustees, who also paid for the construction of the existing Kafue and Luangwa Bridges. The main arterial roads are constructed and maintained by government through the Public Works Department or the agency of the general administrative staff; some 2,014 miles of 'district' roads are controlled by road boards which are financed by grants from government. A sum of £9,349 was spent on reconstructing arterial roads in 1936 and £20,220 on maintenance; the unit rate of reconstruction is £18 a mile, and that of maintenance of the superior type of roads is £7 10s. a mile. Private individuals and companies run motor transport from points on the railway to Abercorn, Solwezi, Fort Jameson, and other outlying stations; but there cannot be said to be any serious competition with the railway, which traverses the centre of the country from north to south and leaves most of the country to be tapped by motor roads. Motor transport is expensive, and is used more for local traffic than for the development of native areas or the carriage of export

goods to the railway, except in East Luangwa Province, where tobacco is carried by road into Nyasaland and also into Southern Rhodesia.

(d) *Nyasaland*

The Nyasaland road system was first developed to meet the needs of European planters and later adapted to provide for the native cultivation of cotton and tobacco as export crops. The natural soil conditions are more favourable to earth-road construction than those of Northern Rhodesia, and only a small part of the system has required surfacing with metal. Some 951 miles of road, of which 96 miles have a macadam surface, are classed as 'all weather roads' and 1,200 as 'seasonal roads'. In addition there are 1,220 miles of tracks usable by light vehicles in the dry season. A main road runs through the northern part of the territory and connects with the Tanganyika system; other connexions are made with the Northern Rhodesia Great East Road, with Southern Rhodesia via Portuguese East Africa, and with the Portuguese roads to Port Amelia and the east coast. The road system serves most of the areas of production in the south of the protectorate¹ and thus acts as a feeder to the railways, but communications are undeveloped in the northern area.² There is in the south a considerable extent of competition with the railways, particularly in the case of the road to Rhodesia which carries tobacco to Salisbury. A Roads Transport Ordinance was passed in 1934, with the object of co-ordinating the transport services and restricting competition.

(e) *Tanganyika Territory*

The Tanganyika roads are based on a war-time system which was constructed with little regard to correct alignment and grading; the available resources for post-War reconstruction have mainly been used in improvements such as bridges and culverts, and in new lines of route to replace unsuitable gradients. In the War much use was made of unpaid or scantily paid labour; the

¹ *Report on the Nyasaland Railway and proposed Zambesi Bridge*, Colonial 27, 1927, p. 18.

² Speech of the Governor at the opening of the Legislative Council, Oct. 1935.

chapter dealing with labour has shown the extent to which any compulsory or unpaid labour is now used on the roads.¹ The recent construction of the road from Mbeya to Chunya in the Lupa gold fields averaged about £300 per mile, and maintenance of main and grade A roads cost some £10 and £7 per mile respectively during 1935; these rates are not unusually high, but the length of the roads makes their maintenance a heavy charge, the sum paid for this purpose in 1935 being £43,746. A considerable programme of constructive work is now being carried out, including a new road to shorten from 464 to 240 miles the communication between the Lupa gold fields and the Central Railway; a sum of £53,412 was spent on construction in 1935. The Public Works Department maintains 2,784 miles of main roads and 1,478 miles of district roads; a further 10,000 miles of roads or tracks are maintained by the district administrations from public funds, and many more miles of tracks are maintained by the native administrations, their cost being met from native treasury funds. Given, however, the large area of the territory, and the character of the existing railway communications, which were designed for strategic rather than commercial purposes, the mileage of main roads is clearly still inadequate. The greater part of both the main and district roads is unsurfaced, and the district roads are for the most part unsuited for traffic in wet weather. The main roads connect Dar-es-Salaam with the Tanga area and Tanga with the Kenya roads via Moa; Nyasa and North Eastern Rhodesia via Dodoma and M'beya, thus forming part of the Rhodesia-Kenya Great North Road; also Iringa and the northern area with Mahenge. Regular motor-transport services for passengers and goods are run by companies and individuals, and growing competition between rail and road services necessitated consideration of means of control or co-ordination of the rail and road systems. In 1936 an inquiry² for this purpose was conducted by Sir Osborne Mance on behalf of the East Africa Transport Policy Board; the Government Committee which examined his report considered that conditions in Tanganyika did not

¹ See Chap. XI, pp. 616 ff.

² Brigadier General Sir H. O. Mance, *Report on the Co-ordination of Transport in Kenya, Uganda, and the Tanganyika Territory*, 1937.

require a comprehensive licensing system to restrict competition, but that a control of goods traffic on routes competing with the railway was necessary in the public interest.¹ The finances of the Tanganyika Railways do not permit of a competitive lowering of rates.

(f) *Kenya*

In Kenya, road making may be said to have begun in 1905 with the construction of feeders to the railway. One of the first roads built was from Fort Hall to Nairobi, formerly connected by a trail of 80 miles, impassable for wheeled traffic owing to bad gradients and dangerous river-crossings. As the expected traffic did not warrant great expenditure, the surface was formed of blocks of *murram* which, when beaten or rolled with water, formed a hard brick-like surface; it became the standard class of road for communication between the more important centres not connected by railway. In Nairobi itself, and generally in the black cotton soil region, the impermeability and great expansion and contraction of the soil made it unsuitable as a foundation for roads, a difficulty which was accentuated by the appearance of motor vehicles. In 1916 it was estimated that the cost of construction of a 16-foot first-class road was £1,091 per mile, as compared with £420 per mile of somewhat inferior road before the War.² In the native areas road making was in the earlier stages carried out by the local population, ordered out by their headmen, under the supervision of Administrative Officers. Construction usually followed existing native paths, with a surface hardened by use, which, however, readily dissolved in the wet season. These roads sufficed for administrative needs, until the motor car gave rise among settlers and tourists to a demand for all-weather roads. It was no longer possible to exact compulsory and unpaid labour on the roads,³ as it was clear that natives would be working on roads having little immediate value to them locally, while others they needed more were neglected; it was found, moreover,

¹ *Report of Committee to inquire into the Question of Competition between Road Transport and Railways in the Tanganyika Territory*, 1937, p. 16.

² A. G. Bush, 'Road Development in British East Africa', *Minutes of Proceedings of the Institution of Civil Engineers*, vol. cci, 1916, pp. 313-17.

³ See Chap. XI, pp. 616 ff.

that the construction of better-class roads required the services of qualified engineers. The Department of Public Works took over responsibility for all main roads, except in remote parts, and the cost of construction rose steeply. The total length of roads in the charge of the Public Works Department is now over 10,000 miles, of which some 3,700 are classed as principal arterial roads. In 1935 some 816 miles had a hard surface, the remainder being earth roads which are not always passable after heavy rains. To protect the railway against road competition, the carriage of goods by motor transport is forbidden, subject to exemptions, along certain scheduled roads running parallel to the railway.¹ Experiments are being carried out with a type of strip construction and a cheap form of bitumen surfacing which it is thought may cost about £300 to £400 per mile. In 1936 a total of £39,990 was spent in European areas on trunk roads and £10,328 on roads in native areas. A committee appointed to investigate the desirability of co-ordinating and regulating all forms of transport presented its report in 1936, and drafted a bill providing for the control of road transport where necessary by licence.

(g) *Uganda*

Uganda is little served by railways, and the growth of cotton cultivation has given special importance to the existence of a good road system. It is fortunate that the protectorate has been able to develop a system of roads that is generally regarded as being among the best in Africa. The main roads are properly formed and graded, and are surfaced with laterite gravel; a factor which has assisted the making of roads of this quality is that the soil (unlike that of parts of Kenya) provides a good foundation, and that supplies of *murrum* are plentiful throughout the country. But Uganda has also profited to an exceptional degree by the well-established customary law, regularly applied in the Buganda Kingdom itself, which has made available a large body of unpaid labour for the roads.² At the end of 1935 there were 2,038 miles of main roads built and maintained by the Public Works Department; of these, 1,189 miles were first-class roads (for wheeled

¹ Carriage of Goods by Motor (Prohibition) Ordinance, 1932.

² See Chap. XI, p. 619.

vehicles up to 9 tons), 526 miles were second-class, and 784 miles were third-class roads. The average cost of maintenance was £19 3s. 7d. a mile. In addition there were approximately 4,800 miles of roads built and maintained by the native administrations.

(h) *Nigeria and British Cameroons*

In West Africa road construction was for some time confined to the coast and the belt of country near the railway lines; from this part the interior was reached by a network of native tracks. Generally speaking, conditions for road construction in West Africa are less favourable than in areas such as Uganda or Nyasaland; thus, in Uganda the construction of a 24-foot wide road with a 9-inch foundation of laterite and a centre width of 10 feet installed with granite has been estimated to cost £200 per mile and £30 per mile per annum to maintain; in the Gold Coast, where road metal is scarce and the climate unfavourable, the cost of constructing a gravelled road for light traffic 16 foot wide has been estimated to cost £800 per mile and £50 per mile for annual maintenance.¹

In Nigeria the road system is now well developed; there are 3,775 miles of road maintained by the Public Works Department, 168 miles with bitumen surface and 3,607 miles of gravel and earth; another 19,338 miles of gravel and earth road are maintained by the native administrations out of native treasury funds. All the roads maintained by the Public Works Department, and 2,192 miles out of those maintained by the native administrations, are open to traffic all the year round. A Communications Board has been appointed to deal with questions of road policy; the general scheme of development approved by it aims at through communication by road from north to south and at further opening up the Logoja and Cameroons Provinces; also at the widening and metalling of existing roads to meet the demands of increasing traffic.² Research on alternative methods of construction is said to have proved that suitable soil grading, with or without bituminous proofing, will provide adequate road surfaces at a lower cost than has hitherto been available. In 1935-6 the Public Works Department spent £89,577 on roads and bridges, exclusive of township roads, an

¹ Sir John Eaglesome, 'Road Constructions in West Africa', *West Africa*, Oct. 16, 1937, p. 1430.

² *Nigeria Handbook*, 1936, p. 101.

average of £24 per mile. The road system acts generally as a feeder to railways; a government system of motor feeder services operates in the Northern Provinces and carried 19,308 tons in 1935-6. But competition with railways by motor transport is increasing, particularly on the Ibadan-Lagos Road which runs parallel to the railway.

In the mandated territory of the Cameroons the Public Works Department maintains 132 miles of all-weather motor roads and the native administrations between 300 and 400 miles of earth roads, but these are in some cases impassable during the rains. Traffic on the Buea and Tiko section of the motor road increased from 100 tons per day in 1935 to between 500 and 600 tons in 1936, and it is proposed to treat the surface with bitumen. The completion of the new Mamfe-Bamenda road has been delayed owing to the difficult country encountered between Mainyu Bridge and Bamenda; this section of 75 miles is estimated to cost £30,000. The Bamenda roads are linked to the French Cameroons' system, providing access to the Duala Railway. The maintenance of roads in the southern area is specially onerous owing to damage by heavy rainfall. Road communications would seem to be less well developed in the northern than in the southern part of the territory.

(i) *Gold Coast and British Togoland*

The 6,200 miles of roads in the Gold Coast are divided into three classes:—those maintained by the Public Works Department, comprising 1,967 miles of gravel roads and 469 miles with a tarred surface; better class lightly gravelled roads, with semi-permanent bridges and culverts; and earth roads with timber bridges maintained by the administrative establishment. The government maintain motor transport services in connexion with the railways, and there are now no large private transport companies operating in the territory.¹ Motor roads extend from Kumasi to Tamale, connecting the railway with the Northern Territories. In 1936 legislation² came into force to prevent the carriage of certain goods over roads which may compete with the railways; as, however, only one through road has been com-

¹ *The Gold Coast Handbook*, 1937, pp. 90-1.

² Ordinance 38 of 1936.

pleted, it is too early to judge whether the restrictions will have the desired effect. The conditions in the Northern Territories would seem to favour the further development of the road system for the transport of produce rather than the extension of railways.

There are no railways in Togoland under British Mandate; communications in the Southern Province section consist of 218 miles of motorable roads, of which 3 miles are maintained by the Public Works Department and 215 by the District Commissioners. In the north the Gold Coast Public Works Department maintains the Tamale-Yendi Road, which is linked to the Gold Coast road system. Yendi is also linked to Accra via Kpandu. The country has a large number of earth roads constructed by the chiefs and maintained from native administration funds; as the revenue of the native treasuries is small and the chiefs are no longer permitted to employ unpaid communal labour, construction of further roads has become difficult.¹ It has been suggested that this problem has an educational value, as bringing home to the chiefs the advantages of direct taxation,² and also the benefit to be gained by leasing land rather than selling it.

(j) *Sierra Leone*

The roads in the Sierra Leone Protectorate are divided into motor roads and chiefs' roads; the latter, which are maintained by tribal authorities, are not usually open to heavy motor vehicles, and are sometimes closed to all motor traffic in the wet season. The motor roads are constructed and maintained by the Public Works Department; mileages are 287 in the Northern Province and 526 in the Southern Province. Some 253 miles of road in Freetown and the peninsula are gravelled with laterite or bitumen surfaced; the other motor roads are surfaced with laterite; there are numerous rivers too wide to bridge, and on these the administration maintains fifteen ferries which are capable of taking lorries. A new motor road, about 80 miles in length, is to be completed in 1939 at a cost of some £400 a mile along the coast of the peninsula, financed from the Colonial Development Fund.³

¹ *Report to the League of Nations on Togoland*, 1936, pp. 12-14.

² See Chap. X, p. 587.

³ *The West African Review*, June 1937, p. 12, and *Colonial Development Advisory Committee, Eighth Annual Report, 1936-7*, Cmd. 5537, 1937.

The maintenance of the provincial motor roads cost £11,155 in 1936. Road competition with the railway route between Freetown and Makeni has caused heavy losses to the railway, but legislation is now in force¹ by which the transport of certain produce or goods from other than local areas is prohibited.

(k) *The Gambia*

In the Gambia the extent of the territory on each side of the river is such that no extensive system of main roads is required, but the district road system, needed for the transport of native produce, is as yet undeveloped. A main road from Bathurst, which branches to Cape St. Mary and to the Kombo North and Central Districts, has 29 miles of its length macadamized.

(l) *The French Colonies and Mandated Territories*

In the French colonies a great amount of work has been done in the last few years in the extension and improvement of the road system. In French West Africa roads hardly existed outside certain urban areas in 1914; in 1937 there were stated to be some 50,000 km. of motorable roads.² The character of the laterite soil found in many parts of French West Africa has allowed roads to be made without special metalling, and though the standards observed would be regarded as unsatisfactory in British areas containing European settlers, the roads are reasonably serviceable. In the more sandy regions of Senegal and in the mountainous areas of French Guinea, construction has been more difficult. The extension of the road system has linked the interior of the country to the railways by a network of roads passable by cars, at least during the dry season. Of the total of 50,000 km. as shown in 1937, the communications classed as main roads had a length of some 13,100 km., the remainder being classed as subsidiary roads and tracks. The road system centres round a main axis formed by the Dakar-Bamako Road which will be linked to the provincial capitals and other parts of the colonies by inter-colonial routes. From Bamako, two main routes are to lead,

¹ Ordinance 6 of 1937.

² *Discours prononcé par le Gouverneur Général de L'Afrique occidentale française à l'ouverture de la session du Conseil de Gouvernement, novembre 1937.*

one to Northern Africa via Gao, an important air centre, and the other to Lake Chad via Niamey. The principal inter-colonial routes are at present from Dakar to Bamako via Kayes (1,290 km.); St. Louis to Kayes (770 km.); Grand Bassam to Bamako (1,191 km.); Bobo-Dioulasso to Niamey (850 km.); Bamako to Kankan (338 km.); Niamey to Savé (770 km.), and a connexion with French Equatorial Africa from Niamey to Zender and Chad (1,430 km.). The inter-colonial routes are the concern of the Governor-General, the local governments financing and carrying out the works approved, according to a general policy. Road construction has been mainly financed by loan funds and maintenance assisted by the system of *prestation*, of which an account has been given in the chapter dealing with labour.¹ Motor transport is increasingly used and in some areas the government runs its own services. In 1924 the growth of road traffic in French West Africa necessitated the promulgation of a Highway Code by *arrêté* of the Governor-General, which was brought into operation for each colony as required by means of local *arrêtés* of the Lieutenant-Governors.² In 1935 the Code was embodied in a decree; its provisions have subsequently been adopted by the Government of French Togo.³ The roads in French Togo have also been developed in recent years as part of the *outillage économique* of the territory; like French West Africa, Togo has drawn largely on loan funds for the purpose. The roads comprise an inter-colonial system of 1,000 km. of all-weather roads linking the principal centres with the neighbouring territories, 600 km. of secondary all-weather roads acting as feeders to the railway, and 1,400 km. of third-class roads or tracks only usable during the dry season.⁴

The system of communication in French Equatorial Africa comprises two inter-colonial routes, namely the Bangui-Cameroon Road from the capital of Ubangi-Shari to the sea and that from Brazzaville to Bangui; a smaller inter-colonial route joins Mitzi-Ojeni and Ebolowa. In 1933 there were in Ubangi-Shari 7,000

¹ See Chap. XI, p. 624.

² Decree of June 21, 1934, amended by Decree of Feb. 14, 1935.

³ Decree of June 16, 1935. See also *Rapport annuel au Conseil de la Société des Nations sur l'administration du Togo pour l'année 1935*, p. 167.

⁴ *Rapport annuel au Conseil de la Société des Nations sur l'administration du Togo pour l'année 1934*, p. 49.

km. of main roads, mostly all-weather routes; Chad had 4,600 km. of roads, but mostly impassable during the rainy season; in the Moyen-Congo, which is served by numerous navigable river routes, there were 3,200 km. of tracks, of which only 500 were considered fit for motor traffic; in Gabon roads are less developed owing to the use of navigable river routes, about 1,000 km. being in use in 1933.

In the matter of communications, as in many other respects, French Equatorial is less advanced than French West Africa. One of the principal obstacles to motor traffic is the existence, particularly in Ubangi-Shari, of large numbers of unbridged rivers or streams, crossed by ferries which are frequently no more than a raft supported on canoes.

In the Cameroons under French Mandate the road system, which had only 430 km. in 1922, had increased by 1937 to 4,000 km. of good-class motor roads and over 1,600 km. of secondary roads passable in the dry season.¹ Here the construction of the road system is for the most part carried out under the supervision of the Administrative Officers, who receive some instruction in road making on their appointment to the African service.²

(m) *The Belgian Congo and Ruanda-Urundi*

In the Belgian Congo the construction of motor roads has in the last few years been systematically developed, in order to provide feeders to the combined rail and river system to which reference has already been made.³ There are now 43,063 km. of motor roads maintained by the state *Service des Travaux Publics*, and encouragement has been given to the formation of motor services, in many of which the state has a financial interest. The *Messageries Automobiles du Congo* (the *Maco*) alone operates 4,800 km. of route. Roads are classified as main arteries and district roads; in 1935 the arterial roads comprised 5,161 km. of principal roads, 7,758 of secondary roads, and 2,206 of less important roads *pour voyageurs*; the district roads, mainly of local interest, were 36,338 km. in extent, and there were also 9,708 km. of private roads.⁴ The amount expended in upkeep of the main roads

¹ H. Labouret, *Le Cameroun*, 1937, p. 149.

² Sir J. Eaglesome, *op. cit.*

³ See above, p. 1547, and below, p. 1591.

⁴ *Rapport annuel sur l'administration du Congo belge*, 1936, pp. 93-4 and 110.

(25,861 km.) was 6,349,341 francs in 1935, or an average of about 246 francs per kilometre, the cost varying between 643 francs per kilometre in the Élisabethville Province for main arteries to 91 francs in the Lusambo District for *voyageur* roads. As in French Equatorial Africa, one of the difficulties of developing the use of motor transport lies in the large number of rivers and streams, the bridging of which would involve a prohibitive expenditure. The extent to which unpaid labourers such as tax-defaulters are used on the roads is referred to in Chapter XI.¹ In the Belgian mandated territory of Ruanda-Urundi roads are classed as in the Belgian Congo; 214 km. of arterial road connect Usumbura-Astrida with the Belgian Congo, and 1,751 km. of second-class roads connect various points in the territories with the arterial road; if *routes pour voyageurs* and private roads are included there were in 1935 some 5,459 km. of roads passable during the whole or part of the year. A considerable extension of the road system appears to be required.

(n) *Portuguese Territories*

In the Portuguese colony of Moçambique a system of earth roads, gravelled in some areas, is gradually being built up. The soil in the coastal areas is sandy and unsuitable for earth roads and maintenance is expensive, but in provinces farther from the coast, good earth roads can be maintained at relatively small expense. The main roads are that from Lourenço Marques to the Transvaal frontier (89 km.), providing access to Johannesburg via Swaziland, and two roads from Tete, to the Southern Rhodesia frontier (146 km.) and to the Nyasaland frontier (128 km.), forming a direct road link between Salisbury and Blantyre, a route used for the transport of Nyasaland produce, and actually competing with the railways. Another road connects with the Nyasaland system from Moçambique (650 km.), and a road from Vila Pery connects with the Southern Rhodesian system at Umtali, 130 km. Some years ago the total mileage of first-class roads was given as 4,822 km., second-class 6,705 km., and third-class 11,003 km. In areas served by motorable roads the regulations forbid native portage. In 1931 some 4,000 km. of earth roads

¹ p. 621.

had been made in the territories administered by the *Companhia de Moçambique*. In Angola there are, in addition to various dry-weather roads, over 15,000 miles of good motor roads: 6,000 miles of these are in the districts served by the railway, and act as feeders to the main line.

V. RAILWAYS¹

(a) *The Union of South Africa*

The history of the construction of railroads in South Africa will serve to illustrate some of the problems of railway finance and management later encountered in other parts of Africa. As has been shown, the transport system could not in South Africa be based on navigable waterways of importance; the factor which actually determined the routes taken by the main lines was the discovery of rich mineral deposits—diamonds at Kimberley, gold on the Witwatersrand, coal at Wankie, lead and zinc at Broken Hill, or copper at Katanga. The first line opened in South Africa was a two-mile stretch of standard gauge, from the Point to Durban, completed in 1860; at that date a line from Capetown to East River, and on to Wellington, was under construction by an English company, holding a guarantee of 6 per cent. on a sum of £520,000. By 1873, when diamonds were found at Kimberley, there were still only 58 miles of railroad in the Cape and 5 in Natal. An extension was urgently called for, in order to carry stores and equipment to Kimberley; but a line from Capetown had to cross mountain ranges, semi-arid country, and plateaux rising to 6,000 feet, while the value of the diamond deposits was still undetermined. The governments concerned, in considering the route which a railway should follow, had in view the possibility of attracting traffic through the Cape ports, with a consequent growth in customs revenue, a consideration that had little significance to private enterprise. In the circumstances, it could not be expected that railway development would be undertaken by companies unless they received substantial concessions,² and, as was shown when proposals were made in 1860–70 to build a line in Natal, there was a desire to avoid commitments that might in

¹ See map facing p. 1537, and fuller map in S. H. Frankel, *Capital Investment in Africa*, 1938.

² On this point see the authorities quoted in S. H. Frankel, *op. cit.*, chap. v, sect. iii.

time prove burdensome to the colonies. But the need for speedy construction was imperative; ox wagons took a month or two months to transport goods from Port Elizabeth or Capetown to Kimberley at £15 to £30 a ton, and coaches or mule carts took seven or nine days for the journey at a charge of £12 a passenger. The Cape Government took construction into its own hands. Acquiring the small private lines to which reference has been made above, it started in 1873 on a standard-gauge railway from the Cape to Kimberley, substituting in 1881 the 3 ft. 6 in. gauge which was subsequently adopted throughout the south. Political pressure from the Eastern Province demanded equality for all the Cape ports, and a beginning was also made on lines from Port Elizabeth and East London. Natal in 1876 began to build coast lines in order to serve its sugar estates and, anxious to share in the trade with the interior, took over the private line at Durban and began to extend it towards the Free State and the Transvaal.

The 650-mile line from Capetown to Kimberley was completed in 1885, when the Port Elizabeth and East London lines were nearing Colesberg and Aliwal North on the Orange Free State border, and the Natal line had been brought as far as Estcourt.¹ This was still the situation when the proclamation of the Witwatersrand as a public gold digging in 1886 and the first gold boom of 1889 presented a new objective for the extension of the South African railways. The line of advance was obvious, but the policies of railway construction could not be separated from considerations regarding the customs duties on goods passing through the ports in transit to the republics. Up to 1889 the coast colonies retained the whole of these duties; in that year the Cape Colony and Free State entered into a customs union, and agreed that the proposed line to Bloemfontein should be continued by the Cape on to the Vaal river, the border of the Transvaal; while Natal, preferring to remain free for a competitive lowering of tariffs, refused to sign the convention, and pushed on its own railway towards the Transvaal. The Transvaal, on its part, was anxious to avoid dependence on the British ports, and had from the first seen in Delagoa Bay the best exit and entrance for its

¹ E. A. Walker, *A History of South Africa*, 1928, pp. 397, 412, L. C. A. and C. M. Knowles, op. cit., vol. iii, p. 259, and *The Cambridge History*, op. cit., pp. 451, 780.

traffic; it organized a system of portage from the Bay, and in 1875 signed a protocol with Portugal providing for co-operation between the two states in the building of a railway to the 'centre of trade' in the Transvaal.¹ But no active steps were taken to promote construction, and the matter remained at a standstill until activity was stimulated in 1882 by the gold rush at Lydenburg. The treaty was then ratified, and preparations were made for a survey of the route by the two governments, each of which granted a concession to a company for building the lines from the respective termini. Money could not, however, be raised for the project, and the Transvaal, under pressure from the miners at Lydenburg, approached Cape Colony in 1885 and 1886 for a customs union and a railway from Kimberley. This the Cape refused, but soon after, when the value of the discovery of gold on the Witwatersrand was confirmed, making it potentially one of the most important markets in Africa, the Cape received in its turn a similar rebuff from the republic. The Portuguese Government now arranged that the construction of the line from Delagoa Bay should be started; the Transvaal attempted to block the extension into its borders both of the Port Elizabeth Railway from Bloemfontein and of Rhodes' continuation of the Cape Railway from Kimberley; in 1889 it at length saw Delagoa Bay linked to the Transvaal border, and forthwith allowed the Netherlands Railway Company to start on the section to Pretoria. Rhodes' line from the Cape, refused a passage through the Transvaal, had to continue its way towards Rhodesia through Bechuanaland; the De Beers' trust deed conferred authority to build railways, and in 1890 the line to Kimberley was being taken from Kimberley to Vryburg, whence the Bechuanaland Railway Company, an offshoot of the British South Africa Company, continued it to Mafeking. The Netherlands Company was now once more in difficulties about raising money; the Transvaal Government was forced to buy its shares and obtain a loan from the Cape, under an agreement which obliged the Netherlands Company to build a bridge across the Vaal and construct within the Transvaal a line which would serve to extend the Port Elizabeth line to Johannesburg and Pretoria. This was completed in 1892, and there

¹ J. van der Poel, *Railway and Customs Policies in South Africa, 1885-1910, 1933*, p. 5.

followed a lowering of rates over the Natal line, in order to compete with the Port Elizabeth railway, which, however, retained almost a monopoly of the Transvaal carrying trade until the Pretoria-Delagoa Bay line was finally opened in 1894.

In 1895, therefore, the position was as follows. The Witwatersrand was linked to the Cape ports, and to Durban and Delagoa Bay, by lines competing as far as the Transvaal borders; inside the republic, however, the Netherlands Company controlled all the railways. When Cape Colony threatened to cut rates to prevent traffic being transferred to the Delagoa-Pretoria route, the Netherlands Company fixed the rates over the Transvaal section from Viljoens Drift, along which Cape traffic had to pass, at 8*d.* per ton per mile, compared with the average of 2·4*d.* charged by the Cape. This led to the off-loading of goods on to ox wagons at the frontier for road transport to the Rand, and to the 'drifts' crisis of 1895. The reopening of the drifts gave a temporary relief to the situation, but the railway war continued. Political alliances cut across economic interests, the Free State and the Cape railways competing with those of Natal and the Transvaal; the second group, with the aid of the prohibitive rate imposed on the terminal section, proved the stronger, and in 1897 the Delagoa Bay line carried 60 per cent. and Natal 15 per cent. more traffic to the Transvaal than in the previous year, while the Cape lines carried 30 per cent. less.¹ Natal's share then began in turn to decline, falling in 1898 by as much as 17 per cent. When the Anglo-Boer War began the Delagoa Bay line was depriving the Boer colonies of railway and customs revenues that were essential to their financial stability.

After the Anglo-Boer War the railways of the Netherlands Company were expropriated, a sum of £13,500,000 being paid for them, and the lines united with the railways of the Orange River Colony under the control of the Inter-Colonial Council. As the Transvaal had thus been made part owner of over 400 miles of the route to the Cape, it was hoped that the division of interests would be diminished. An agreement between the colonies was urgently required, both to remove the drawbacks of differential rates which still continued in operation, and to prepare for the programme of

¹ *Ibid.*, pp. 81, 85.

construction necessary in order to link the towns with agricultural and mining districts. But the Rand's dependence on native labour from Portuguese East Africa¹ stood in the way; the Transvaal had entered into a *modus vivendi* with the Portuguese Government in 1901 which preserved to Delagoa Bay its former preference in the matter of railway rates and customs duties, and the share of the Cape lines in the Rand traffic continued to fall. The solution was bound up with the settlement of the customs problem; in 1903, following a conference at Bloemfontein, the customs union was extended to include the four colonies, the High Commission Territories, and Southern Rhodesia, but there still remained the conflict of interests between the agricultural producer and the Rand and other urban consumers. The conflict centred on the system of preferential rates on colonial produce. To raise these rates to the level of those levied on imported goods would destroy the protection enjoyed by farmers, unless customs duties were proportionately increased, thereby raising the cost of living; on the other hand, to reduce the rates on imported goods would adversely affect railway revenues. These considerations, the continued loss by the Cape and Natal lines of traffic diverted to Delagoa Bay, and the severe economic depression which occurred after 1903 were responsible in greater or less degree for the continuation of the competitive struggle between the different railway groups. The rivalry led to a conference in 1908, which in the event dealt not with railway questions, but with the broader question of unification, thus opening the way to the National Convention of the same year.² The Portuguese *modus vivendi* of 1901 was replaced by the Transvaal-Mozambique Convention of 1909, which secured to Delagoa Bay from 50 to 55 per cent. of the Rand traffic; this arrangement was renewed in a new convention of 1928, but a subsequent agreement in 1934 reduced the proportion to 47·5 per cent.

The mileage of government lines had increased from 4,257 in 1902 to 6,989 at the time of Union.³ Much of the new construction had served to correct the longitudinal character which the railway system had assumed, as the result of the effort to connect ports and

¹ See Chap. XI, pp. 638-9.

² See Chap. VI, p. 151.

³ *Official Year Book of the Union of South Africa*, No. 17, 1934-5, p. 720.

mining centres by the shortest route. The Cape built a line through the south-western districts to Port Elizabeth, and also opened up the sheep country farther on to East London; this, with other lines connecting the main systems and serving the agricultural districts, was the second stage in the history of railway transport, which continued after Union. The South Africa Act of 1909 vested all ports, harbours, and railways of the colonies in the Governor-General-in-Council; control was to be exercised through a board of three commissioners, appointed by the executive, with the Minister as chairman, but doubts as to the interpretation of this provision led to the passing of the Railway Board Act, 1916, which constituted the Board as an advisory body, and placed the general manager under the control of the Minister. There was at Union a formal separation of railway from general finance, which had previously been interdependent;¹ the South Africa Act further embodied (s. 127) the well-known provision that the railways and harbours should be 'administered on business principles, due regard being had to agricultural and industrial development within the Union'. Other measures providing that schemes of construction should be advised upon by the Board before submission to parliament, and that in certain cases losses on a line or services supplied at less than the cost were to be made good from Consolidated Revenue Fund, pointed to a desire to procure safeguards against the danger of the railways being monopolized by the claims of any one territorial or political interest. The institution of a separate Railway and Harbours Fund, from which only interest on invested capital could be transferred to Consolidated Revenue, limited the use of railways as a method of taxation.²

The construction of new branch lines into agricultural areas was continued after Union, the mileage of government lines being increased to 9,407 by the end of 1916. In 1922 the 1,330 miles of railway in South-West Africa was incorporated in the Union system. The building of branch lines, which had been almost suspended after 1916, was resumed, and 2,240 miles was added in the thirteen years 1923-35. In 1936 the Union and South-West Africa had a total mileage of 13,596, which included 680 miles of

¹ S. H. Frankel, *The Railway Policy of South Africa*, 1928, p. 79.

² See also, p. 1607, below.

private line, 597 miles being the Vryburg-Bulawayo section of the Rhodesian Railways. The total expenditure on the system of communications as a whole, including ports and steamships, has been £171,903,144. The mileage of open line per 1,000 square miles of territory is 17.32, as compared with 9.40 for Australia and 12.20 for Canada.¹ Under Act 30 of 1922 the Union has electrified sections of the Natal main line, and parts of the Cape Peninsular system; electrification is being carried out in the Witwatersrand area, which, when completed, will bring the mileage of electrified lines to 1,064 miles single track, perhaps the most extensive network of electrified railways in the British Empire.

(b) *The Rhodesias*

The Rhodesian railway system is owned by three companies: the Rhodesia Railways Ltd.,² the Beira Railway Co. Ltd., and the Shabani Railway Co. Ltd. Of the 2,708 miles of line constituting the whole system, 1,356 are in Southern and 643 in Northern Rhodesia, 399 in the Bechuanaland Protectorate, 112 in the Union, and 198 in Portuguese East Africa, all of which (apart from the Vryburg-Bulawayo section of 597 miles) is managed by a central organization at Bulawayo. The whole system owes its development mainly to the British South Africa Company,³ which assumed in the matter of railway transport the obligations which governments have had to accept in other territories; the company holds the majority of shares in the subsidiary concerns, but the relationship has introduced problems of a kind not usually associated with a state railway system.

Reference has already been made to the political factors which compelled the northern extension of the Cape Railway to abandon the direct route from Kimberley to the Transvaal, and to take the unpromising route through Bechuanaland;⁴ the line reached Vryburg in 1891, and was continued by the Bechuanaland Railway Company to Mafeking. The latter organization, which in 1899 had its name changed to the Rhodesia Railways, received an

¹ *Official Year Book of the Union of South Africa*, No. 18, 1937, p. 493.

² The Mashonaland Railway Co. Ltd. was absorbed by the Rhodesia Railways Ltd. in 1937.

³ *Report on the Railway System of Southern Rhodesia*, C.S.R. 2, 1926, vol. i, p. 5.

⁴ See above, p. 1567.

annual subsidy of £10,000 for ten years, or half the amount promised to the Chartered Company by the British Government,¹ and land grants, amounting to 6,000 square miles, included in the 'railway strip'.² The funds for construction were provided by the issue of debentures with interest guaranteed by the Chartered Company.³ The line, which reached Bulawayo in 1897, was operated by the Cape Government under an agreement effected with the Chartered Company. Meanwhile the rival territorial claims of the British and Portuguese Governments in regard to Moçambique and the adjoining areas had been settled, as a result of the Convention of 1891 which gave the eastern coast-line to the Portuguese, but assured the Chartered Company of access to the sea by stipulating for the construction of a railway from Beira and the limitation of transit duty on British goods to a maximum of 3 per cent.⁴ A concession given by the Moçambique Company for the construction of the railway to the Rhodesian border was subsequently acquired by the Chartered Company, which in 1892 promoted the Beira Railway Company to construct a narrow-gauge line from Fontesvilla, 35½ miles from Beira, to Umtali. This was completed in 1898, two years after a line connecting Beira to Fontesvilla had been built by the Beira Junction Railway Company. The two Companies received blocks of land along the line, amounting to 130,673 and 28,290 hectares respectively;⁵ their capital was raised on debentures, in the issue of which the Chartered Company took a large share. The Mashonaland Railway Company, also financed by debentures guaranteed by the Chartered Company, took the line from Umtali to Salisbury in 1899.

Rhodes had contemplated that the south end of Lake Tanganyika would be the next stage on the way to Cairo, and in 1898 negotiated with the British Government regarding the project.⁶ He was, however, unsuccessful and the line was deflected farther west. Bulawayo was linked to Salisbury by the Mashonaland Railway Company in 1902, but it was from Bulawayo, and not from

¹ J. van der Poel, *op. cit.*, p. 73.

² See Chap. XII, p. 818.

³ *Report*, *op. cit.*, C.S.R. 2, 1926, vol. iii, p. 2.

⁴ J. van der Poel, *op. cit.*, p. 53.

⁵ *Report*, *op. cit.*, C.S.R. 2, 1926, vol. i, p. 7.

⁶ Owen Letcher, *South Central Africa*, 1932, p. 133.

Salisbury, that the line continued its way to the north. The northern extension ran first to the coal fields at Wankie, and thence via Victoria Falls to Broken Hill, where zinc deposits had been found. Up to Kolomo construction was undertaken by the Rhodesia Railways, which received land grants of 801 square miles carrying mineral rights from the British South Africa Company, capital for construction being raised by a further series of debentures guaranteed by the latter company. From Kolomo to Broken Hill the line was built by the Mashonaland Railway Company;¹ this section was opened in 1906. A further section of 132 miles up to the Congo Border was completed in 1909 by the Rhodesia-Katanga Junction Railway Company, formed for the purpose by Sir Robert Williams, who, as explained elsewhere, had a share in the Katanga undertaking, and by Tanganyika Concessions Ltd., which had been formed to work it. It was acquired by the Rhodesian Railway system in 1928. In addition to the main railways, branch lines have been constructed to serve gold and other interests; two of them from Salisbury, one to Shamva and the other to Zawi, pass through good agricultural country. The bulk of European-owned land in Southern Rhodesia is situated within a zone of 25 miles from either side of the railway line;² the native reserves outside this region are badly served by railways.

It will have been observed that the capital for construction was raised largely by debentures guaranteed by the Chartered Company; the capital expenditure on the system up to 1924 is stated by General Hammond to have been £16,977,304, of which the debentures issued by Rhodesia Railways Ltd. and the Mashonaland Railway Company accounted for over £12,000,000.³ By 1911 the Chartered Company had advanced nearly £1,125,000 to the two companies in order to meet the shortfall on the debentures. It appeared at one time likely that, in view of these losses, the Chartered Company would have to face a scheme of reconstruction, but the railway returns subsequently improved and this step was not found necessary. In 1911 the Rhodesia

¹ *Report*, op. cit., C.S.R. 2, 1926, vol. i, pp. 9-10, 16.

² See Chap. XII, p. 819.

³ *Report*, op. cit., C.S.R. 2, 1926, vol. i, p. 5.

Railways Trust was created in order to take over the outstanding debts of the two companies; the outstanding obligations were gradually liquidated, but still stood at about £250,000 in 1936. At that date the outstanding capital of the whole system was £23,300,818, namely, Rhodesia Railways £12,389,003, Mashonaland Railways £8,805,500, Shabani Railway £304,165, and Beira Railway Company £1,802,150. The annual debt charges for debenture interest and the like were then £1,235,909.

After the grant of responsible government to Southern Rhodesia, an agreement was reached that led to the passing of the Railways Act, 1926, together with the Railway (Commission) Ordinance of 1927 in Northern Rhodesia and the Railway Proclamation (No. 8) of 1927 in Bechuanaland Protectorate. These statutes were replaced by legislation in 1935,¹ implementing a new agreement made in 1934, which did not, however, materially alter the system originally established. Under the legislation of 1927 a Railway Commission was set up, with members representing the three governments, and an independent chairman, to exercise certain functions of financial control, including decisions regarding the fixing or revising of rates, or the amounts to be carried to reserve. The law precludes such reductions in the schedule of charges as are calculated to reduce the total income when the amount standing to the credit of the reserve account is less than twice the loan provision; the Commission in 1936 remarked that proposals for rate reductions, unless compensated for by increased traffic, could not be considered favourably for some time to come.

General Hammond noted in 1926² that the railways were constructed as pioneer lines, planned to suit immediate needs, with little regard to traffic prospects along the route; he recommended the undertaking of route and traffic surveys, as part of a development programme intended to cover a period of years. In 1931 a general survey was carried out, with the aid of a grant from the Colonial Development Fund, in order to explore the possibility of constructing a line to connect the Rhodesia Railways with the South-West Africa system at Walvis Bay, a distance from Bulawayo

¹ Southern Rhodesia Railways Act, 1935; Northern Rhodesia Railways (Commission) Ordinance, 1935; Bechuanaland Protectorate Railway Proclamation, 1935.

² *Report*, op. cit., C.S.R. 2, 1926, vol. i, pp. 5, 81.

of 950 miles. While agricultural interests in Southern Rhodesia at one time strongly supported this line, as opening an alternative market to that of the Union, expert opinion¹ had found little justification for it, owing to the uncertainty whether the export of chilled meat, or the market for coal from Wankie, would be adequate to compensate for the almost complete lack of wayside traffic. These doubts would still seem to stand in the way of undertaking the very heavy expenditure which would be involved. Another proposal which has received consideration is that of constructing a line connecting Sinoia, north-west of Salisbury, to Kafue, south of Lusaka, a diversion which might reduce by 514 miles the distance taken by traffic coming down from the Congo. A survey of the suggested route in 1913 estimated the cost of construction as over £2,000,000;² but there is a general agreement that the extent of the traffic forthcoming would not justify its construction.

The rate of branch-line construction has been slow, the total mileage within Southern Rhodesia having increased in the period 1924-36 from 1,252 to 1,356, and in Northern Rhodesia from 506 to 643.³ In the latter territory the branch lines have been built mainly to serve the copper mines; the European farming community, as in the south, is settled for the most part in a zone on both sides of the railway, though a number of settlers, such as those in the Fort Jameson and Abercorn Districts, are remote from the line. There is little in the character of either European or native agricultural production which would appear to justify the construction of branch lines, and the probabilities of extension here, as in Southern Rhodesia, would appear to be dependent on the development of mining. An analysis of the figures of railway receipts shows that their movement corresponds very closely with the figures of mining production. There has been in the last two years a considerable rise in receipts; but the Rhodesian system has still to contend with the loss occasioned by the decline in coal traffic resulting from the reduction in the fuel requirements of the Belgian Congo mines, and the loss of part of their export of copper.

¹ *Ibid.*, p. 85. See also *The South and East African Year Book*, 1937, p. 194.

² *Report*, *op. cit.*, C.S.R. 2, 1926, vol. i, pp. 82-4.

³ *Ibid.*, p. 4, and General Manager's Report, 1936, p. 31.

There has at different times been a feeling expressed by producers that the rates are not fixed so as to secure the maximum development of the territories. The Hammond Report found¹ that the rates could not be said to have hindered the mining industry and were not excessive on the majority of agricultural exports, maize being the main exception, but on imports they were higher than elsewhere. The chief cause necessitating the maintenance of high import rates was the lack of traffic, but the employment of a high proportion of European workers, the numbers in 1936 being 3,631 Europeans to 11,197 natives and coloured,² also places a strain upon the resources of the railway. The average earnings of European railway artisans were found by the Railway Court of Enquiry, 1929,³ set up after the strike on the Rhodesian system, to approximate generally to the wage rates on the Union system, which is in a far better financial position than that of Rhodesia, and it would seem also that the railway artisan was at that time remunerated somewhat more highly than the engineering artisan in mining.⁴ The opening of the line to Lobito Bay and the completion of the rail-river connexion between the Katanga and Matadi has introduced a competitor for the Belgian traffic; but the Northern Rhodesia traffic is secured to the Rhodesian system by the mutual dependence of the coal and copper mines.

(c) *Nyasaland*

The Nyasaland railway system consists of 334 miles of 3½-foot-gauge line. In 1904 the Shire Highlands Railway Company began the construction of the first line, from Port Herald to Blantyre, a distance of 113 miles. Previously exports from Nyasaland were carried down the Shire and Zambesi rivers to Chinde, where they were transhipped into lighters and carried to Beira; the railway was intended to provide a better means of transport over the earlier part of the journey. Increasing difficulties of navigation led to the construction in 1915 of a further 65 miles of line, from Port Herald to Chindio, on the north bank of the Zambesi, by the Central African Railway Company, and in 1919 it was decided

¹ *Report*, op. cit., C.S.R. 2, 1926, vol. i, p. 52.

² General Manager's Report, 1936, p. 24.

³ *Report of Railway Court of Enquiry 1929*, C.S.R. 17, 1929, p. 19.

⁴ *Report on Industrial Relations in Southern Rhodesia*, C.S.R. 3, 1930, paras. 90, 95.

to build the Trans-Zambesia Railway from Murraça, on the south bank of the Zambesi opposite Chindio, to join the Beira Railway at Dondo, 18 miles from Beira. The Trans-Zambesia line was constructed by means of £1,200,000 debentures at 6 per cent. guaranteed by the Nyasaland Government. The river fleets of the African Lakes Corporation and the British Central Africa Company were then purchased by the Trans-Zambesia Railway, partly to stop river competition, and partly in order to ferry traffic across the Zambesi between Chindio and Murraça; this purchase was financed by an issue of £200,000 ten-year notes at 5½ per cent. guaranteed by the Nyasaland Government. Railway connexion with the port at Beira, and with the Rhodesia-South African railway system through Dondo, was now complete, save for the crossing over the Zambesi between Chindio and Murraça. In 1926 General Hammond's Committee recommended the construction of a bridge to replace the Zambesi ferry; this bridge was completed in 1935 at a cost (including its approaches) of approximately £3,000,000. Meanwhile the line was extended north from Blantyre to Chipoka on Lake Nyasa at a cost of £882,441. For the purpose of carrying out these schemes the present Nyasaland Railways Ltd. was formed in 1930 with an authorized capital of £475,000; it acquired the debenture stock and shares of the Shire Highlands Railway Company which went into voluntary liquidation, and the greater part of the issued share capital of the Central African Railway Company, which became a private company. The Nyasaland Railways Ltd. financed the construction of the bridge and the extension to Lake Nyasa by means of advances from the Nyasaland Government, these advances being covered by income debenture stock. The Central African Railway and Trans-Zambesia Railway, in return for advances made to them by Nyasaland Railways Ltd., gave it income bonds secured on the earnings of the bridge and its approaches. The Nyasaland Railway Company is controlled by a board in London on which government is represented. The Imperial Government gave to the Nyasaland Government a series of interest-free loans, amounting to £1,500,000 in 1935-6, to assist in these operations; a certain portion of the Nyasaland public debt is also met by the Imperial Government.

With the completion of the line northwards the more productive areas of Nyasaland have been brought within reasonably direct railway or lake communication with Beira, though, as has been seen, this has been effected at the cost of a heavy obligation on the part of the Imperial and Nyasaland Governments for the payment of interest charges. The receipts of the Nyasaland Railways Ltd. amounted in 1937 to £193,000; the railway depends largely on its import and not on its export traffic, the latter in 1937 accounting only for £58,000. So far receipts have not been sufficient to pay interest on the share capital.

(d) *Tanganyika Territory*

The railway system of Tanganyika consists of the Central Railway from Dar-es-Salaam to Kigoma on Lake Tanganyika, 773 miles, with branch lines from Tabora to Mwanza on Lake Victoria, 235 miles, and from Manyoni to Kinyangiri, 93 miles, and the Northern Railway from Tanga to Arusha, 273 miles. The Central and Northern lines are not connected except by road; both are metre gauge. In 1904 the Germans gave a concession to a company with a capital of £1,000,000, towards which the German Government was chief subscriber, for the construction of the Central Railway; it reached Lake Tanganyika early in 1914, following the old Arab trade route through much sparsely populated and fly-infested country. Earthworks on the branch line from Tabora to Mwanza were started by the German company before the War; the present line was laid in 1925 and opened in 1928; it taps a fertile area producing groundnuts and cotton. The branch line from Manyoni was begun in 1930 and completed in 1933. The first part of the Tanga (or Northern) Railway was constructed by a company taken over by the German Government in 1899; it was extended for political reasons, reaching Moshi in 1911. Plans for an extension to Arusha were drawn up by the Germans, but were not put into effect by them; the Tanganyika Government began construction of the remaining portion in 1927, and the line was opened in 1929. The Voi-Kahe branch line, which forms a connexion between the Northern line and the Kenya-Uganda Railways, was constructed for military use during the War. The value of the German lines as taken over by the

mandatory government was estimated at £4,894,050, for which a sum of £34,000 was paid to certain claim-holders;¹ but both the Northern and Central lines were extensively damaged during the War by the German forces, and an expensive programme of development and repairs was required when funds became available. As has been seen, all the lines are owned by the Tanganyika administration; a Railway Council of four official and four non-official members has been appointed to advise on questions of policy. The railways, the finances of which are now being separated from general revenues, represent a capital charge of over £5,000,000. For the five years preceding 1936 there were annual deficits in their working, and their liability to the territory, including borrowings from treasury funds, amounted in 1936 to £452,131; in addition £413,049, representing the deficiencies during 1919-21, are excluded from the accounts, being only repayable should the railways become a separate entity; any question of repayment of a further £449,505, advanced by the Imperial Exchequer to meet deficiencies between 1921 and 1926, is deferred until 1938. In 1936 the railways showed a surplus of £52,875, and in 1937 there was a surplus of £83,198. Further development is to be financed from a railways renewal fund; repayment of an advance to this fund from general revenue absorbed £50,000 of the 1936 surplus, and another £50,000 was paid into it out of the 1937 profits. From the 1937 surplus £591 has also been found to finance capital works, leaving a net surplus of £32,607 for the year, which will reduce the accumulated deficit to £175,703. Although a surplus of about £36,000 is estimated for 1938, the financial position remains insecure; no provision has been made for wasting assets, and the position is not one in which a reduction of rates could be safely contemplated. The source from which the railways draw their revenue is now limited to local traffic; since 1931 a considerable part of the Belgian copper freight has been diverted from Dar-es-Salaam to Lobito Bay; in that year the copper freight amounted to 50 per cent. of the value of the freight carried.

The extension of the Central Railway to Mwanza brought it

¹ Article 257 of the Peace Treaty, which provided that the mandatory should not be charged with any portion of the debt of the German Empire or states, has been interpreted to imply that the mandatory is not responsible for the obligations incurred by German companies or the German Government on account of this or similar railways.

into competition with the Kenya and Uganda Railways for the trade of the southern portion of the basin of Lake Victoria, which had hitherto been collected by the steamers and lighters of the latter railways for dispatch from Kisumu. Other interests were also involved, notably those of the firms using Mombasa and Dar-es-Salaam respectively as ports of export. The Secretary of State ruled in 1928 that non-competitive rates should be arranged, leaving trade to take its natural course, a decision implemented by an agreement permitting the Kenya-Uganda Railways to retain their lake traffic at all points except Mwanza; the rates from Mwanza to either Dar-es-Salaam or Mombasa were to be equalized, and the rates from Tanganyika ports across the lake were made higher via the Tanganyika route than via Kenya by the cost of transport across the lake. It has been contended by Tanganyika interests that this arrangement still left certain advantages with the Kenya-Uganda Railways, derived, among other causes, from their ownership of the steamers on the lake. In the course of an official inquiry made by Mr. R. Gibb in 1932,¹ it was suggested that the traffic arising at, or destined for, Tanganyika ports on the lake should be pooled to prevent undue competition, and that as regards new traffic a contribution should be made by the Kenya and Uganda Railways to the Tanganyika Railway for tonnage in excess of an agreed proportion. In 1934 the Secretary of State decided against a change in the previous arrangement until the total traffic to the Tanganyika lake ports reached the figure of the tonnage handled by the Kenya and Uganda Railways prior to the building of the Mwanza line; this figure was exceeded in 1935, but Sir Osborne Mance, who reported on the matter as the result of a special inquiry made in 1936, expressed the view that it would be preferable to revert to the decision of 1928, and allow the routes to function in accordance with their relative advantages; he considered that the present rates on the Kenya-Uganda system with Mombasa should apply equally to Dar-es-Salaam for all Tanganyika ports, the revenue from traffic being pooled and divided on a percentage basis.² The settle-

¹ R. Gibb, *Report on Railway Rates and Finance in Kenya, Uganda, and Tanganyika*, Cmd. 4235, 1933, p. 52.

² Brigadier-General Sir H. O. Mance, *Report*, op. cit., pp. 49-55.

ment finally arrived at in 1937 provides for equality of rates, freedom of choice by the trader, payment to the transport systems for services rendered, and a division of profits between the two railways. It is estimated that the first year of operation of the agreement will result in a payment by the Kenya and Uganda Railways to the Tanganyika Railways of about £5,000.¹

The Northern (or Tanga) line, owing to the Voi-Kahe connexion, also brings the interests of the Tanganyika Railways into touch with those of the Kenya-Uganda system; it is able to divert to Mombasa the traffic from the coffee- and sisal-growing area of Kilimanjaro and Moshi. Suggestions which have been made either to close the connecting line with Kenya to reduce losses, or to hand it over to the Kenya Government,² have not been carried out, but the question appears of recent years to have lost some of the importance which once attached to it. The rates from Moshi to Mombasa are assimilated. Sir Oswald Mance's report suggests that a pooling arrangement on the principle suggested for the Lake Victoria traffic would be likely to give the Tanganyika Railways a fair share of profits and traffic.³ The Commission on Closer Union in East Africa expressed views in favour of a united control of the railway systems of the two territories in order to avoid competition between the ports as well as the railways.⁴ There are, however, obvious difficulties of a political nature in such an arrangement, so long as the two territories are not united in any form of federation. In 1933 the Conference of East African Governors recommended the formation of an East African Transport Policy Board, and the Secretary of State decided that the Governors' Conference itself should exercise the functions of the Board in order to discuss questions of policy affecting Kenya, Uganda, and Tanganyika.

It is noteworthy that 56 per cent. of the engine drivers and 65 per cent. of the employees in the Engineering Department are Africans.

¹ *Report to the League of Nations on Tanganyika Territory*, 1937, p. 193.

² R. Gibb, *Report*, op. cit., p. 49.

³ Brigadier-General Sir H. O. Mance, *Report*, op. cit., pp. 55-7.

⁴ *Report of the Commission on Closer Union of the Dependencies in Eastern and Central Africa*, Cmd. 3234, 1929, pp. 108-28, 292.

(e) Kenya and Uganda

The Kenya and Uganda railway system consists of the main line from Mombasa to Kampala, 879 miles, with a connexion to Kisumu, 131 miles, to Soroti, 100 miles, serving the Eastern Uganda cotton districts, and from Voi to Kahe, 92 miles, to connect with the Tanganyika Railways. There are seven minor branch lines, with a mileage of 329 miles, and in addition a private line of 91 miles serving the soda deposits at Lake Magadi. The lines are metre gauge, a fact due to their having been constructed in the first instance by Indian engineers and fitted with rolling stock from India. The original construction of the railway was accepted as essential to the establishment of an effective protectorate over Uganda, partly as assisting in the suppression of the slave trade, partly for strategic reasons; in 1896 parliament approved a preliminary expenditure of £3,000,000 and in 1900 an additional £2,000,000, without any estimate of the prospects of a commercial nature which the line might possess. The ultimate cost of the railway in the first period of construction was £5,502,592; the liability for the payment, or payment of interest, is recognized; Sir Alan Pim has, however, given the opinion that the finances of Kenya should be relieved of this prospect of a heavy service of debt in connexion with the loan. The question has been deferred and will come under review during the year 1938.¹ The line was completed as far as Kisumu in 1901; the total mileage at the end of 1915 was 777 miles. With the exception of the Voi line, built for military purposes during the War, development ceased until 1922, when a period of expansion again set in, and, as has been shown, the lines now have a mileage of 1,622.

The Kenya and Uganda Railways are administered as a government department of Kenya with a General Manager in charge. Difficulties arose early regarding the respective interests of Kenya and Uganda in the railway; these came to a head in 1918 when Kenya (which at that time received credit for the whole of the net revenue from the line) placed a surcharge, followed in 1919 by a supercharge, on traffic rates in order to meet a deficit in its general

¹ *Report on the Financial Position and System of Taxation of Kenya*, Colonial 116, 1936, p. 243.

revenues.¹ As a result, the Kenya and Uganda (Transport) Order in Council of 1925 created the post of a High Commissioner of Transport, with a Railway Advisory Council of four official and four non-official members from the two territories, to deal with matters of estimates, rates, fares, and extraordinary expenditure; the High Commissioner was to be the Governor of either Kenya or Uganda; the expenditure of the railway and other transport services was to be separated from general revenues, and placed to a railway and harbour account. Mr. Gibb reported in 1933 that local pressure and influence were brought to bear upon management and construction, and that the ruling policy of cheap export rates, high import rates, and differentiated rates in favour of locally produced commodities² was inspired by political considerations rather than sound railway economics. He suggested that the authority of the Advisory Council should be abolished and a small London board be formed to act as a corrective to local interests. In order to secure the complete separation of railway from general policy, he suggested forming a company on the lines of the Nyasaland Railway Company, so that future financing could be carried out by the Company, the two governments concerned holding rights proportionate to their interests.³ These recommendations have not, however, been accepted.

The finances of the railways have an important bearing on the budgetary position of Kenya. The expenditure on capital account at the end of 1936 amounted to £21,999,072; of this £8,074,966, including the £5,502,592 mentioned above, is free of interest, being derived from non-interest-bearing loans or revenue sources; the interest on the balance is guaranteed by the respective governments in the proportions of £13,045,343 by Kenya and £878,763 by Uganda, though it is also stated that Uganda accepts responsibility for £2,000,000 out of the former sum, representing assets constructed in Uganda. In 1935 the surplus on the railways and allied services was £362,772,⁴ of which £319,161 was paid into a reserve account; the balance of the renewals and other funds at the end of 1935 was £2,483,867. The railway is primarily a goods,

¹ See *Report of the Uganda Development Commission*, 1920, p. 10.

² See further on this point, Chap. XX, p. 1391.

³ R. Gibb, *Report*, op. cit., pp. 43-4.

⁴ In 1937 it was £584,326.

not a passenger, line, and rates have been adjusted to enable the principal crops of cotton from Uganda, and maize and coffee from Kenya, to be exported as economically as possible; it is therefore the policy to counterbalance low export rates, particularly on maize from Kenya and cotton from Uganda, by high import rates, these being based on a taper rate which increases by diminishing amounts as the distance increases. The arrangement is one which has been criticized in Uganda, where it is contended that the native protectorate is helping to subsidize the export of European-grown maize from Kenya. Preferential rates also exist for goods grown or manufactured locally, and this, so far as Kenya is concerned, acts as a form of tariff protection at the expense of railway finances. Apart, however, from these considerations the high rates charged on the railway, which appear to be necessary in order to meet the loan charges, amounting in 1936 to £850,100, are undoubtedly a serious handicap to the development of Kenya. The handicap would be further increased were interest to be charged by the Imperial Treasury on any considerable part of the interest-free debt. But for this consideration the position of the railways is sound, since they are able to present a surplus after contributing to a sinking fund as well as to a renewals fund; in this latter respect the finance of the railway is at a disadvantage compared with that of a private undertaking.

(f) *Nigeria*

The Nigerian railway system has a total length of 1,900 miles, and for administrative purposes is divided into the Western, Northern, and Eastern Districts. The Western and Northern Districts main line runs from Lagos to N'guru, 843 miles; there are three branch lines with a mileage of 275 miles, and a 2½-foot-gauge line of 133 miles from Zaria to the tin-mining plateau of Jos connects with the main line from Port Harcourt. The construction of the system was begun in 1898, a short line being built from Lagos to tap the local agricultural and forest products; the second line began inland at Baro to connect Kano with the river Niger; the line from Lagos was then extended to the Niger at Jebba, and, as river transport became inadequate, the railway was continued through an uninhabited belt to join the Kano-Baro line at

Minna; deposits of tin were then found on the Bauchi plateau and the Zaria-Jos Railway was constructed. The Eastern District main line runs from Port Harcourt, joins with the Western line at Kaduna, 569 miles, and has a branch line of 63 miles, completed in 1927, connecting with the Zaria-Jos line; a bridge of considerable length crosses the Benue at Makurdi. With the exception of the Zaria-Jos branch line the gauge throughout is 3 feet 6 inches. It will be seen that there are three routes for produce from the north to the sea—by rail to the two ports, Lagos and Port Harcourt, and by river transport on the Niger; the Minna-Baro line by tapping the Niger river forms a problem of rail versus river transport by allowing produce to be brought down by rail to the Niger and thence forwarded by a private river transport company. This section of railway was hastily constructed and is at present worked under restricted conditions, its future being uncertain.

The railway system belongs to the state. The total capital expenditure was £22,950,856 in 1936, of which £19,993,437 was loan capital; the annual interest charge was £1,048,729. In 1929-30 there was a surplus, which was paid into the general revenues; in the years 1930-5 there were deficits amounting to £956,923, though no provision was made for renewals; the receipts allowed no adequate provision to be made for renewals in 1935-6. There is no doubt that the railway, which had not had the benefit of any interest-free loan, had become by this time a heavy charge on the general revenues of the territory; the bulk of its traffic was low-rate produce, and the eastern section, between Kaduna and Enugu, showed in particular a heavy deficit which had to be carried by the system as a whole. In 1936 it was decided to reorganize the system as far as possible on commercial lines; the Enugu-Kafanchan section was classed as a development project, and the finances of the railway system were relieved of its interest charges. For the future, railway deficits will be met by loans from government funds at rates of interest to be fixed at the time when they are taken, the interest on existing loans having been reduced to 3 per cent.; the total sum at charge on capital account has been adjusted in accordance with the report of a committee appointed in 1934 to deal with the question of wasting assets.¹ The railway will now

¹ *Memorandum on the Nigerian Government Railway Estimates for 1936-37*, Jan. 1936.

be self-contained in the matter of finance, and will, if possible, build up its own reserve fund to meet losses such as those which have in the past followed on the failure of a main export crop. A sessional paper, No. 12 of 1935, recommended that the state services of railways, marine, colliery, and ports be fused into one commercialized department; it has, however, been decided not to attempt a full fusion, but to create a Director of Transport who will also be Chairman of a Transport Advisory Board. It is estimated that the railways have lost largely from road-transport competition in the coastal areas, and the eastern section is also affected by the existence of ports unconnected with the railway. Taking the position as a whole, it may be said that though the position regarding the railways has been clarified, their position is still insecure; the trade of the territory has not yet developed up to the transport capacity of its railways.

(g) *The Gold Coast*

The Gold Coast railways consist of two main lines from the coast to Kumasi, that from Takoradi having a mileage of 173 miles, and that from Accra 193 miles; there are five branch lines with a mileage of 134 miles. Except for the 10 miles of the Weija branch line, which is of 2½-foot gauge, the lines are of 3½-foot gauge. Construction was begun from Sekondi in 1898, largely as the result of the gold-mining activity at Tarkwa, but it was not completed to Tarkwa until 1901 owing to labour difficulties and the last Ashanti war; Obuasi, the head-quarters of the Ashanti gold fields, was reached in 1902, and Kumasi in 1903. The line from Accra was begun in 1909, but for various reasons did not reach Kumasi till 1923. Owing to constructional difficulties, and the high price of materials immediately after the War, the capital cost of the railway stood in 1936-7 at the high figure of £9,354,139; about £1,479,936 was provided from government funds, free of interest, but the loan charges on the remainder constitute on an average about 36 per cent. of the gross annual railway expenditure. The railway is organized as a government department with a general manager; it is of interest to note that the European staff in 1936-7 was 101, African clerks were 570, and African drivers and semi-skilled employees 1,291. The revenue of

the railways is principally derived from the transport of cocoa and manganese ore for export, and is subject to fluctuations with the market demand for these two articles: it fell, for instance, from £1,242,947 in 1928-9 to £683,103 in 1932-3. Between 1929-30 and 1934-5 the annual working showed a deficit; in 1935-6 it showed a surplus of £35,983, partly owing to the successful cocoa crop, the increase in manganese-ore exportation, and extended gold-mining activity, and partly to a reconsideration of policy in regard to rates and fares. In 1936-7 the surplus was £115,633. The reduction in the fares has led to a large increase in third-class travel.

(h) *Sierra Leone*

The main line of the state railway runs 227 miles from Freetown to Pendembu, a trading centre near the boundaries of Liberia and French Guinea; a branch line of 104 miles from Boia to Kamabai serves the Northern Province. The construction of the main line was begun in 1896, but it did not reach Pendembu till 1908. The capital expenditure at the end of 1936 stood at £1,428,243, of which £382,743 was obtained from general revenues, free of interest. The gauge throughout the system is 2 feet 6 inches; a feature of the system is the large number of bridges, totalling 43 with two spans or more. In 1927 the railway finance was separated from general revenues, and organized as a self-contained account; but the railway has constantly been unable to meet its charges for interest, and from 1899 to 1935 general revenues had to make a contribution of £1,927,044 on this account. In 1936 there was a small surplus. The railway is, however, dependent on the export of the one principal commodity of palm kernels, and the state of its finances is liable to be seriously affected by the contraction of overseas markets; heavy expenditure on renewals is estimated to fall due in 1940, and as there is no renewals fund the government will presumably be called upon to make special provision for it. A subsidy of 15s. per ton conveyed is paid out of general revenue as a contribution in consideration of a special reduction in the railway rate for palm kernels. A railway of 3½-foot gauge, owned by the Sierra Leone Development Company, connects the iron-ore deposit at Marampa with a port at Pepel, a distance of about 50 miles.

(i) *French West Africa*

The railway system in Senegal consists of the Dakar-Niger main line from Dakar to Koulikoro, 1,219 km., with 70 km. of branch lines; another main line, the 'groundnut' line, follows the coast from Dakar to St. Louis, 263 km., with a branch line to Linguère of 128 km. In French Guinea a main line of 662 km. runs from Conakry to Kankan; in the Ivory Coast a main line runs north to Dioulasso, 796 km.; in Dahomey a main line, the *Central-Dahoméén*, runs to Parakou, 437 km., with branch lines of 143 km.; there are other short small-gauge branch lines totalling 111 km. Construction of the Kayes to Koulikoro section of the main Dakar-Niger line was begun in 1881 to unite the Senegal and Niger rivers; owing to the difficulties encountered it was not completed to Koulikoro until 1906. The section to Thiès, to connect the Sudan with the sea, was finished in 1924; the branch to Kaolack, a port on the Saloum river, shortens the route for shipment of goods by sea by 185 km. The Dakar-St. Louis Railway, which was opened in 1885, was constructed by a concessionary company, and includes the Dakar-Thiès section of the main line. Construction of the Conakry-Kankan line began in 1900, and was completed in 1914; by affording a quicker communication between the Niger and the sea it has diverted traffic from the Dakar-Niger route. The Ivory Coast Railway was begun in 1903, but owing to tribal insurrections and other troubles it only recently arrived at its present terminus. The *Central-Dahoméén* Railway was constructed in 1900 by a concessionary company, from which it was bought by the government in 1930.¹ In 1931 the total length of the railways was 3,426 km., by 1936 this had increased to 3,804 km.² It may be doubted whether the scheme for constructing a Trans-Saharan line will ever come to fruition; its value would be almost entirely military, as enabling troops raised in the West African colonies to take a land route to Algiers. The scheme involves a line from Reggan which after crossing the Sahara would divide into two branches, one to join with the Senegal system via Koulikoro and the Ivory Coast line

¹ *Le gouvernement général de l'Afrique occidentale française*, 1931, pp. 124-36.

² *Annuaire statistique de l'Afrique occidentale française*, 1934-5-6, pp. 52, 154.

via Bobo-Dioulasso, and the other proceeding via Gao and Niamey to join with the Dahomey line.

The railway systems of French West Africa are designed, so far as part of the territory is concerned, as part of a joint river-rail system, and have of late years been developed largely to provide as cheap transport as possible in the interests of the policy of *mise en valeur*. The amount of capital invested in the West Africa system has been estimated at £11,100,000; but it cannot be said to present a self-contained account, in respect either of the statement of the capital at charge, or the amount of interest payable, or the provision made for renewals. It is not therefore possible to check the statements which are from time to time made that these railways are remunerative. In the mandated territory of French Togo three railways of metre gauge run from the Port of Lomé, namely, to Anécho, 44 km.; to Palimé, 119 km.; and to Blitta, 280 km. The first two lines were constructed by the Germans between 1905 and 1907, and the Blitta line was taken in 1911 as far as Atakhamé; the remaining section was constructed by the French in 1934 at a cost of 110,000,000 francs.¹ The railways are owned and administered by the government; in 1936 the railway administration was brought under that of the Dahomey system, but the administrations have again been separated.

(j) *French Equatorial Africa*

In the French Congo a state railway line of metre gauge runs from Brazzaville on the Congo river to Pointe Noire, a distance of 560 km. The exports from the Middle Congo Province of Equatorial Africa had previously been dependent on the Belgian railway, Kinshasa-Matadi, and the use of the Belgian port; apart from any political considerations, there was a habitual state of congestion on the railway. But the difficulties of constructing an alternative route through the Crystal Mountains were very great.² Some 3,500,000 francs was spent on preliminary surveys after the project was first formed in 1886;³ construction only began in 1922 and was not completed until 1934, at a total cost of 930,000,000

¹ *Rapport annuel au Conseil de la Société des Nations sur l'administration du Togo pour l'année 1934*, pp. 20-49.

² W. Fitzgerald, *op. cit.*, 1934, pp. 295-8.

³ M. Sarraut, *La mise en valeur des colonies françaises*, 1923, p. 421.

francs.¹ The *Société de Construction des Batignolles*, which had the contract for construction, had great difficulty in securing labour, and an *arrêté* of the Governor-General distributed over the different provinces the quota of labour to be supplied, on a system which amounted in effect to compulsory recruitment.² Health conditions were inadequately safeguarded, and it is said that 15,000 to 18,000 natives died during the construction, the mortality being 45·20 per cent. in 1927 and 17·14 per cent. in 1929. The railway has been described, from the economic point of view, as 'une absurdité et un désastre'.³ It is not easy to determine how far this stricture is justified; in 1933 the line was stated to have shown a profit of 239,762 francs, but in the absence of any account of the capital position of the railway and its interest obligations it is difficult to accept this surplus as real.

The Cameroons under French Mandate is served by two metre-gauge railway lines, the North line from Banabéri to N'kong-samba, 160 km., and the Central line from Douala to Yaoundé, 308 km., with a branch line joining Otelé to Mbalmayo on the navigable Nyong river, which was changed from 60 centimetre to metre gauge in 1936. The Germans began the construction of the Central line in 1910; M. Sarraut alleges that it was part of a scheme for a transcontinental line to Dar-es-Salaam.⁴ The statement has been made that the Germans expended about £4,000,000 on the railways taken over by the French in Togo and the Cameroons; as in the case of Tanganyika, nothing was paid by the mandatory on this account.⁵ When the French occupied the country the Central line had been made for a distance of 181 km.; by 1927 it had been continued to Yaoundé, trouble having in the meanwhile been encountered in securing labour other than by forced recruitment. The Northern line has not been extended since the French occupation, but a commission appointed by the Minister for Colonies in 1930 proposed the extension of the system from Yaoundé to Kaita on the Logone river and thence branching to Fort-Archimbault and to Maroua. The cost of the

¹ *Annuaire de documentation coloniale comparée*, 1933, vol. ii, p. 321.

² See Chap. XI, p. 614.

³ R. Susset, *La vérité sur le Cameroun et l'Afrique équatoriale française*, 1934, pp. 134-45.

⁴ A. Sarraut, *op. cit.*, p. 443.

⁵ Minutes of Ninth Session, Permanent Mandates Commission, 1928.

1,675 km. of line involved is estimated at 1,200,000,000 francs. The railways are owned and managed by the administration; the cost of the construction undertaken by the French was less than 300,000 francs per kilometre, and the expenditure on the main lines was met from general revenues; the reconstruction of the branch line was financed from a loan for the general development of the territory. The railway is in consequence treated as free from interest charges, and the rates for passengers and for goods are kept at a low level; in 1921 a reserve fund was formed, financed from profits. Except in 1931 the railway has in recent years shown a profit.

(k) *Belgian Congo*

The railway system of the Belgian Congo was primarily designed, in the words of the resolution of the Berlin Convention of 1885, 'dans le but spécial de suppléer à l'innavigabilité ou aux imperfections de la voie fluviale sur certaines sections du Congo'; but of late years there has been a tendency to give increasing importance to the railways, which, with the motor roads, are becoming the arterial lines, with the rivers taking more and more the position of 'feeders'.¹

As the mineral resources in the north-east and the south of the country began to assume importance, both political and economic considerations demanded attention to the development of communications with the Congo port of Matadi. The basis of the present system of communications is the Matadi-Léopoldville Railway,² and the two axes to tap the gold-mining areas in the north-east region, and the copper deposits in the southern Katanga, are being formed by lines of communication, starting from Léopoldville, which combine river and rail transport. On the first axis the Congo river will continue to provide the main line of transport from Léopoldville to Stanleyville. From Stanleyville a mixed line of river and rail transport already exists via Kindu, Kongolo, and Kabalo up to Albertville on Lake Tanganyika. But a Congo-Nile Railway has also been projected, which, taking off from

¹ W. Fitzgerald, *op. cit.*, p. 296.

² The railway is sometimes known as Kinshasa-Matadi; Kinshasa is the industrial town, Léopoldville the administrative.

Stanleyville, will turn north-east to serve the Kilo-Moto gold mines, and then proceed to Kasenyi on Lake Albert, thus coming into contact with British East Africa through Butiaba, on the east shore of the lake, and with the Nile system through the Albert Nile and Nimule. The second axis based on Léopoldville is formed by the Kasai river route to Port Francqui, whence the Bas-Congo-Katanga line, known as the B.C.K., runs south-east to Tenke (where a connexion runs west to join the Lobito Bay Railway near Dilolo on the Angola border) and then proceeds through the Katanga copper fields to link up with the Rhodesian Railway system at Sakania, a short distance below Élisabethville. A railway has also been projected to join Léopoldville and Port Francqui, thus accelerating transport by substituting a rail route for the steamer route on the Kasai. The number of river crossings would make the scheme very costly.

The railway system covered in 1935 a total distance of 4,788 km. Shown in detail, it consists of the *Chemin de Fer du Mayumbe* from Boma to Tshela, 140 km., constructed between 1900 and 1903; the *Chemin de Fer du Congo*, 400 km., from Matadi to Léopoldville, partly constructed between 1890 and 1898, and reconstructed and completed in 1929;¹ the *Chemins de Fer du Congo Supérieur aux Grands Lacs Africains*, 125 km., from Stanleyville to Ponthierville, finished in 1906, with a further 355 km., from Kindu to Kongolo, built 1906 to 1910, and 273 km., from Kabalo to Albertville, completed in 1915; the *Chemin de Fer du Bas-Congo au Katanga* (the B.C.K.), from Port Francqui to Sakania, 1,836 km., constructed between 1909 and 1931, with a branch 520 km. long, starting at Tenké and forming the connexion with Dilolo on the Angola border; the *Chemins de Fer Vicinaux du Congo*, 715 km., of 60 cm. gauge, from Bondo, on a navigable branch of the Congo, to Paulis, completed in 1934; and a short line of 93 km. which assists traffic between Lakes Tanganyika and Kivu.

The railways have been constructed and are maintained with the active participation of the government. In the case of the Matadi-Léopoldville line the state, besides making an original

¹ To secure the necessary land for this reconstruction Belgium exchanged in 1927 a small area of land near Dilolo on the Angola border (the 'Dilolo Boot') for 3 sq. km. near Matadi.

grant of 100,000 hectares of land, assisted in providing capital, but otherwise allowed freedom in construction and exploitation. In other cases the state has carried out the construction and retained an interest in finance and management, as in the instance of the *Chemins de Fer du Congo Supérieur aux Grands Lacs Africains*, or has formed a company in which the state holds the majority of the shares, as is the case with the *Chemin de Fer du Bas-Congo au Katanga*. Since 1928 the assistance given has been mainly by government guarantees of interest. Only two small local lines are run by companies without the financial assistance of the state. Besides the *Compagnie du Chemin de Fer du Congo* which holds the Matadi-Léopoldville concession and has received a grant of over a million hectares, known as the Bus-Block, other railway companies have also had large grants of land. In more than one case railways, after importing labour from French West Africa and Nigeria, found it necessary to apply for state assistance in impressing local labour, and large forces of workers were thus secured for them. As in the case of labour impressed elsewhere for similar purposes, there was a high incidence of disease and mortality amongst them.¹ The gauges of the railways vary from 0 m. 60 to 1 m. 067, but through-connexion with the Rhodesian system has necessitated construction of the Bas-Congo-Katanga lines on the South Africa standard basis of 3 feet 6 inches, and future construction will only be authorized by the state in this gauge for main lines or in the 60-cm. gauge for secondary lines.

It would appear that about up to 1932 some £38,000,000 was invested in Congo railways, and in addition the colony had advanced approximately £2,300,000 from revenue. The published figures do not provide material for determining the exact nature of the financial return on the capital invested; it is known, however, that of the guaranteed railways the *Chemin de Fer du Katanga* is the only one which has never called on the state to pay up its guarantee; and the matter is complicated by the fact that in addition to its guarantee the state has bound itself in some cases to pay direct subsidies in order to lower the rates for freight. Reports of the Colonial Commission of the Belgian senate constantly refer to the losses incurred; the result in their opinion

¹ See above, p. 1590, and Chap. XI, p. 614.

is that development has been hampered by high rates on freight, while the colony has suffered direct losses under its guarantee which it could have avoided under a system of state construction and management. The difficulties arising from the present system were felt with especial force during the depression; in 1932 the interest and amortization charges amounted to 340,000,000 francs, or 165 per cent. of the total receipts of the railways. In view of the inter-dependence of the river, railway, and land systems of the Congo, a government *Comité Permanent de Co-ordination des Transports au Congo* was instituted in 1929, composed of heads of the public utility companies and government representatives, in order to consider common transport problems. It appears to have been of assistance to commerce in securing some greater uniformity of tariffs, but the major financial problems arising from the connexion between the state and the railway companies will require a more radical treatment for their solution.

(1) *The Portuguese Territories*

The state railway system of Angola includes the line from the port of Loanda to Malange, 426 km. with branch lines of 184 km., also a line of 106 km. from Port Amboim to Chindinde. About £2,000,000 appears to have been invested in this system and in expenditure on the ports. It taps a good maize, sisal, and coffee region, but the traffic results are said to have so far been disappointing.

Angola has in addition the length of the Benguela Railway between the port of Lobito and Dilolo on the Angola-Congo border. The construction of the Benguela line occasioned at one time an international interest not unlike that aroused by the scheme for a Baghdad railway. In 1900 Portugal had given a concession for the construction of a railway running from Lobito Bay to the central Angola plateau, which appeared to be well suited for European colonization, and by about 1912 a mileage of some 560 km. had been constructed. The most prominent part in the promotion of the scheme was taken by Sir Robert Williams and Tanganyika Concessions Ltd.; the former, as shown elsewhere, had received in 1900 a concession from King Leopold II to exploit the Katanga area. He had formed Tanganyika Concessions Ltd., and

the latter subsequently held a share in the *Union Minière*, created in 1906 to operate the copper mines. It would not appear that the Belgian authorities were in the first instance impressed with the value of connecting the Benguela Railway with the Katanga, since, though it offered them a route to the sea which is shorter by 600 miles than that to Beira, it would compete with the connexion between Matadi, Port Francqui, and the Bas-Congo-Katanga line which they desired to see developed. But about 1913 they agreed with the Portuguese Government that the Benguela Railway should be continued to the Katanga. The capital of the Benguela Railway Company, which stood at about £3,000,000, was insufficient for the purpose, and the attempt to raise fresh capital involved negotiations in which Germany finally took a share. They formed a part of the incidents which had their issue in the secret convention between Germany and Great Britain demarcating their respective spheres of interest in the Portuguese African possessions; the convention seemed to contemplate that in certain circumstances the two powers might move towards occupation of these spheres. The War put an end to any prospect that Germany might share in the Benguela Railway, and when the proposals for the suggested extension were subsequently renewed, an application was made by Tanganyika Concessions for assistance under the British Trade Facilities Act of 1921. At that time Tanganyika Concessions held five-sixths of the shares in the Benguela Company and Portugal the remainder. There was at first some opposition by South Africa to the grant of the loan, in the interests of the Rhodesian Railways, but in 1925 the Trade Facilities Committee agreed to advance £1,250,000 to the Company. The Benguela Railway was completed in 1929, the Belgian Government having made itself responsible for the connexion between Dilolo in Angola and Tenke on the Bas-Congo-Katanga Railway, a distance of about 520 km., this section being completed in 1931.¹ The length of the railway in Portuguese territory is 1,347 km. It is stated that the total cost, including the Lobito Bay port, has been approximately £13,000,000. The greater part of this has been provided by British capital. The railway plays an important part in the policy of colonial reorganization promoted by the government of Dr. Salazar, which attaches

¹ 'The Benguela Railway', *The African World*, June 1935, pp. 36-8.

special value to the development of Angola, hitherto the most neglected of the Portuguese possessions, and to the colonization of the central plateau. The railway company has made a beginning on a small scale in a scheme of assisted colonization; and the population of Nova Lisboa, the railway centre, has lately increased from 1,000 to 5,000. But, as has been shown, the railway receives only part of the production of the Katanga for transport to Lobito Bay, and the general results have so far been disappointing.

In East Africa the state has invested about £6,600,000 in railways, and in addition the Beira Railways and the Trans-Zambesia lines have been built with British capital. The railway system in Moçambique covers approximately 861 miles. The line which runs for 89 km. from Lourenço Marques to join the South African Railways at Ressano Garcia on the Transvaal border is the most important, and has profited greatly from the fact that Lourenço Marques is the port of entry for the gold fields. A line running from Lourenço Marques to Goba on the border of Swaziland and intended to be linked with the Union system is of minor value, since the Union system has not entered Swaziland, which, as has been shown, is served only by a motor service. Another line runs from the port of Moçambique to Ribaué and is intended to form a connexion with the Nyasaland border; it has for the present stopped at about 280 km. from the port. The year 1934 showed a surplus of £423,331 on the Moçambique system; nearly a million tons of freight was received from the South African railways.

VI. AIR TRANSPORT

(a) *Main Trunk Services*

The British Service. With the post-War development in aviation it was early recognized that air communication between Africa and other countries would be of exceptional value owing to the great distances involved. Much preliminary work was, however, necessary, both in the exploration of suitable routes and in the collection of scientific and other data, before practical steps could be taken for the establishment of air services. In the British territories the exploratory work was done by the Royal Air Force,

and soon after 1919 a beginning was made in the construction of aerodromes along the projected Cape to Cairo route.¹ Flights from London to Capetown were undertaken both by individuals and by companies such as the Blackburn Aviation Company under the initiative of the late Captain T. A. Gladstone, and demonstration flights by Sir Alan Cobham followed; many flyers competed for the record from London to Capetown. It was not, however, till 1931 that a mail service was actually initiated.

In 1923 the government had decided to promote the amalgamation of several air companies into one, Imperial Airways Ltd., for the development of Empire air routes, and in 1930 agreements were concluded between Imperial Airways, the British Government, and the Governments of the Union of South Africa and the other territories concerned, for the institution of a subsidized weekly service of mails and passengers between London and Capetown. In February 1931 the service was established as far as Kisumu² and was extended to Capetown in the following year. The scheduled time for the journey, which at first was eleven days, was reduced in 1934 to ten days and in the following year to nine days. In 1935 South African Airways took over the service south of Johannesburg; in 1937 Imperial Airways discontinued the service to the Rand Airport, and inaugurated the flying-boat service down the East Coast to Durban, the time taken being six and a half days. The Empire Air Mail scheme, which had for its object the carriage by air of all first-class mail without surcharge within the Empire, came into operation in the African territories in the summer of 1937. Imperial Airways has also extended its service in other directions in Africa, and now maintains a branch service from Khartoum to Lagos in Nigeria; the other main stopping places are served by feeder lines which will be considered below.

The French Routes. Two regular air services are now in operation. One, operated by *Air-Afrique*, proceeds, in alternation with the Belgian *Sabena* service, across the Sahara by the eastern route and has branch services to Coquilhatville, Brazzaville, Élisabethville,

¹ H. Burchall, 'Air Services in Africa', *Journal of the Royal African Society*, vol. xxxii, no. 126, 1933, pp. 55-73.

² Sir S. Instone, 'Aviation in Eastern Africa', *Eastern Africa To-day and To-morrow*, 1934, p. 63.

Broken Hill, and Quelimane in Moçambique, and finally to Tananarive in Madagascar; in 1937 the journey from France to Madagascar was scheduled to take eight days. The other, operated by *Air France* with flying boats, covers the west coastal route from Casablanca to St. Louis, where the *Aéro-maritime* service continues to Pointe Noire in French Equatorial Africa. At Dakar there is a connexion with the Paris-South America service, and at Cotonou with *Régie Air-Afrique* and the Belgian *Sabena* line. The *Air France* service, inaugurated in 1937, now reaches French Equatorial Africa in four and a half days. In March 1938 a fast weekly service from Paris to Dakar by *Air France* was begun, scheduled to take twenty hours. It is also announced that a feeder service will connect Dakar with the daily Casablanca-London service. Another branch service from Gao-Gao to Timbuktu was opened in February 1938.

The Belgian Services. The Belgian Government can claim the credit of instituting the first regular air service in Africa. In June 1919 a *Comité d'Études pour la Navigation Aérienne (Senac)* was appointed in order to study the question of the development of air transport in the Belgian Congo and to establish a service between Léopoldville and Stanleyville; the *Sneta (Société Nationale pour l'Étude des Transports Aériens)* undertook this latter work, and the first aeroplane was in commission in 1920. In 1923 a more permanent organization, the *Sabena (Société Anonyme Belge d'Exploitation de la Navigation Aérienne)*, was constituted by the state, the colony, and *Sneta*, with a view to regularizing the services to the Congo and within its area. The *Sabena* now runs a mail service from Europe to the Congo, alternately with the French *Air Afrique*, and the Congo itself is well served with internal communications, most of the important centres in the territory being united by air.

The Portuguese Services. A concession¹ providing for the exclusive development of both national and international airways has been given by the Portuguese Government to the S.P.E.L.A. (*Sociedade Portuguesa de Estudos e Linhas Aéreas*) and the *Companhia Portuguesa de Aviação*; a direct line from Lisbon to Lourenço Marques has been under consideration for some time. In Portuguese East

¹ F. Ribeiro Salgado, *L'empire colonial portugais*, 1931.

Africa, Beira is on the Imperial Airways route; in 1935 Rhodesia and Nyasaland Airways started a weekly service connecting Beira with Nyasaland and Southern Rhodesia. One Portuguese Government line, the D.E.T.A., operates a service from Lourenço Marques to Johannesburg, and other developments are under consideration, in particular for Angola, which at present has no air services.

(b) Feeder or Territorial Services

In the Union of South Africa, including the mandated territory of South-West Africa, matters relating to aviation are controlled by the Minister of Defence, who is advised by a Civil Air Board set up under the Aviation Act, No. 16 of 1923. The Union policy is to ensure that all air services should be state-owned, and in 1934 a state service, the South African Airways, took over the local services formerly operated by a private company, the Union Airways. The Union Government also took over the South-West African Airways in 1935, the Imperial Airways feeder services south of Johannesburg in 1936, and, in co-operation with Rhodesia and Nyasaland Airways, the service from Johannesburg to Lusaka in Northern Rhodesia, extending it in 1937 to Kisumu, the Kenya port on the north-eastern shore of Lake Victoria. The route mileage of South African Airways now aggregates 5,935, and its extension into East Africa appears to have a strategic as well as a commercial aspect. There are thirteen D/F wireless stations in the Union for civil aircraft, and special weather bulletins are issued.

In the High Commission Territories there has been little progress in air transport beyond the provision of landing grounds, of which Bechuanaland has nineteen; the Union service from Johannesburg to Windhoek in South-West Africa crosses the territory. In 1933 Sir Alan Pim drew attention to the value to be attached to the extension of air services.¹

The East African territories have all contributed to the financial arrangements with Imperial Airways in connexion with the London-South Africa route, and have provided the necessary

¹ *Report on the Financial and Economic Position of the Bechuanaland Protectorate, 1933*, p. 12.

facilities in their territories. Air services by companies operating inter-territorially had, however, preceded the main trunk route; and these services now act as feeder lines, maintaining regular communication with the Imperial Airways service. In Northern Rhodesia the Rhodesia and Nyasaland Airways provide a local service to Nyasaland and Southern Rhodesia and also form a link with the service of Imperial Airways. The Wilson Airways began operations in Kenya in 1929 with a regular service linking Nairobi and Dar-es-Salaam. This line has obtained the government mail contract, and has extended its services to the neighbouring territories. In 1936 Kenya maintained customs aerodromes at Kisumu, Nairobi, and Mombasa, and 12 other landing grounds and 19 emergency grounds; in Tanganyika in the same year there were 48 government and 6 private aerodromes and landing grounds. In Uganda development has not been so extensive as in Kenya or Tanganyika; Port Bell is a port of call for the Imperial Airways, but aircraft is little used otherwise in the territory. The customs aerodromes are Jinja, Entebbe, and Port Bell.

In the British West African territories aviation has developed more slowly. It was said in 1935 that in Nigeria there seemed 'to be no demand for air facilities of an elaborate nature'¹ and that the landing grounds were only of an emergency kind. In anticipation, however, of the projected extension of the Imperial Airways South Africa service by a branch line from Khartoum to Lagos, to which reference has been made above, landing grounds were put in order at six centres. The Lagos service started in 1937, and from Lagos it is now continued by Elders Colonial Airways to the Gold Coast and to Freetown in Sierra Leone. In 1936 the Gambia continued a previous agreement with the *Deutsche Lufthansa A.G.* for the carriage of air mail by a weekly service between the Gambia and Europe. There was little or no co-operation with French services on the West Coast until 1937, when these were continued to Accra, thus giving the Gold Coast its first regular air mail. Further developments may be expected, and the preliminary survey of a British air route to the West Coast has been completed by representatives of the Imperial Ministry and British Airways.

¹ *Annual Report on the Social and Economic Progress of the People, 1935*, p. 73.

(c) Finance and Administration

The Union of South Africa is alone among the British territories in Africa in maintaining a state air service on a large scale. In the year 1936-7 the Civil Aviation vote was £52,925 and the subsidy to Imperial Airways amounted to £34,000, a reduction on the previous year, when it was £54,000.¹ It would not appear that any of the aviation companies operating in the other British African territories are self-supporting, and nearly all are assisted by government subsidies, in return for which they contract to carry mail and maintain regular services. Of the subsidy given in 1937 to Imperial Airways by the British Government, £135,247 was in respect of the purely African services.² Of the contribution made to Imperial Airways in 1936 by the African territories, Kenya provided £15,000, Tanganyika and Uganda £10,000, Anglo-Egyptian Sudan £5,000, Southern Rhodesia £10,000, and Northern Rhodesia £2,000.

Among the local services, Wilson Airways is also subsidized, Tanganyika in 1936 contributing £2,000. Rhodesia and Nyasaland Airways receive subsidies from Southern Rhodesia which for 1937 amounted to £1,000. Aviation in the Rhodesias owes much to the Beit Trustees, who in 1932 set aside £50,000 for the improvement of air facilities; a chain of emergency landing grounds on the Cape to London route has been completed from this fund. In 1936 Sir Abe Bailey presented £3,000 towards the development of civil aviation.

The total expenditure of the three Governments of Kenya, Tanganyika, and Uganda on air ground services and aerodromes up to 1937 was respectively £63,900, £19,900, and £8,100, while the total revenue from landing fees and services amounted to £12,000.³ In its estimates for the year 1936-7 the Government of the Gold Coast provided for an expenditure of £75,000 for aerodromes and works; Nigeria provided in the same year £81,445, with a special provision of £19,689 for work in connexion with the extension to that territory of the Empire air mail scheme.

¹ *Memorandum by the Secretary of State for Air to accompany the Air Estimates*, Cmd. 5677, 1938, p. 19.

² *Report of the Committee of Enquiry into Civil Aviation*, Cmd. 5685, 1938, p. 85.

³ Brigadier-General Sir H. O. Mance, *op. cit.*, p. 41.

The Belgian and French companies are also subsidized: in 1936 *Sabena* received 14,428,232 fr. and *Air-France* 154,865,873 fr.¹ The local expenditure is also considerable; the French colonies and the mandated territory of the Cameroons have undertaken an active policy of constructing aerodromes and emergency landing grounds on all the main routes. In French Equatorial Africa the Governor-General announced in 1935 that works costing 1,000,000 fr. would be undertaken and further credits would be necessary. The Belgian Congo in 1936 allocated 1,038,939 fr.² to aviation.

In the British colonial and mandated areas aviation is controlled by the Air Navigation (Colonies, Protectorates and Mandated Territories) Order in Council of December 21, 1937, and the International Air Navigation Convention of 1929 has been widely adopted.

(d) *Général*

It has been seen that at an early stage the Belgian Congo saw the advantage of linking up by air services the more important stations in its widely extended territories, and the French authorities have shown of late years considerable activity in providing air communications in Equatorial Africa, which is poorly provided with other means of transport. The Governor-General of Equatorial Africa has said that 'l'aviation est en train de transformer l'Afrique. . . . Elle a supprimé les énormes distances qui, en Afrique, empêchent toute communication rapide, toute liaison permanente, tout contact régulier.'³ An administration has obviously much to gain from the adoption of a means of transport which will enable its officials to make more frequent visits to areas under their charge; perhaps the most conspicuous example in British territories is afforded by Barotseland, where a few hours' journey in an aeroplane now replaces what at one time was a boat journey of three weeks up the Zambesi. The air services have also proved of use for conveying a special class of goods of high value; they are, for instance, now regularly used for the conveyance of

¹ *Report*, op. cit., Cmd. 5685, 1938, p. 87.

² 240,234 fr. *Budget ordinaire*, and 798,705 fr. *Budgets extraordinaires*.

³ 'Discours du Gouverneur Général de l'Afrique équatoriale française à l'ouverture du Conseil d'Administration, 1936', *Annuaire de documentation coloniale comparée*, 1936, vol. ii, p. 225.

gold from the Kenya, Tanganyika, and Congo goldfields, and diamonds from the Congo and West African mines. There is not as yet, however, sufficient public support to encourage the hope that any considerable extension of the existing services can take place without financial assistance from the administrations; and the financial circumstances of some of the territories are such that even the subsidy now paid constitutes a relatively heavy charge. The speeding up of communications with Europe appeals mainly to one class in the territory; the return for the expenditure is, at this stage, indirect rather than direct. It still remains to be seen if the governments can calculate on a more direct set-off due to the shortening of the period now allowed to their officers for journeys on leave, or to savings effected by concentrating the forces maintained for preserving order, instead of keeping them, as at present, in widely scattered detachments. The question whether administrations can feel themselves justified in assisting to finance the extension of existing services must await the result of further experience; meanwhile it will be necessary for them to undertake the consideration of a number of problems which have already arisen in connexion with the use of the air, such as the international co-ordination of meteorological services,¹ the broadcasting of wireless information regarding weather conditions, and, not least, the possible spread of disease either by passengers or by infection carried in aeroplanes by insects.² A situation is also arising in which it becomes necessary to consider the measures required for closer co-operation between air and rail services in order to eliminate wasteful competition.³

VII. CONCLUSIONS

As the preceding narrative has shown, the policy regulating the development of communications has two different aspects. The first relates to the construction of what may be described as the major lines of communication. At the outset it was natural that administrations should, apart from the need for constructing the simple type of communication required for administrative purposes, attach primary importance to the organization of water and

¹ See E. B. Worthington, *Science in Africa*, chap. iv. ² See Chap. XVII, p. 1128.

³ Brigadier-General Sir H. O. Mance, *Report*, op. cit., p. 41.

rail transport from the seaports to the interior, since, in the absence of any internal market, it was necessary to seek as soon as possible an external market for Africa's actual or potential products. It has often been said that it was Africa's minerals and precious stones which brought her within the orbit of European civilization, by creating the need and assuring the capital for constructing the railroads which unsealed the interior of the continent. This is in great measure true in regard to important parts of Africa, such as the Union, Rhodesia, Moçambique, and the Belgian Congo; it does not, however, apply with the same force to Kenya, Uganda, Nyasaland, Tanganyika, or the larger part of British and French West Africa, where communications were constructed either for the transport of types of agricultural produce which commanded an export sale, or in the general interests of the development of the country.

As a result, the administrations were themselves obliged to undertake the financing of a large part of the expenditure incurred in providing rail and water transport. On p. 1317 of Chapter XIX the estimated capital expenditure on the rail and waterway system of that part of Africa with which this Survey deals has been given as £373,000,000, of which £260,000,000 has been incurred in British and £113,000,000 in foreign areas.¹ The non-state enterprise in the British territories amounts to not much more than £28,000,000; in the foreign areas the amount is less easy to estimate, owing to the complications of the Belgian Congo system of railway finance, but for the present purpose the calculation is not material, since in both the French territories and the Congo the state has either a direct liability for a fixed interest charge or has made itself indirectly responsible for interest through a system of guarantees.² The most conspicuous examples of private, as opposed to state, enterprise are the Rhodesian railway system and the Benguela Railway, but it may be added that the British South Africa Company, which promoted the construction of the Rhodesian Railways and bore the expense of implementing the deficiencies in their debenture interest, acted in this respect as much in its administrative as in its commercial capacity. The financial re-

¹ These figures exclude the expenditure in the Sudan. The capital actually at charge is, as preceding pages have shown, a somewhat smaller sum.

² See above, pp. 1592-4.

sults of both the private and state enterprises are of importance as indicating the possibility of future extensions of the existing rail and water systems. The South African Railways, in spite of circumstances to which allusion will shortly be made, have not only earned the whole of the interest on the capital at charge, but have been able to contribute £54,000,000 to a renewals fund and over £11,000,000 to a betterment fund, which has on occasion been used as a means of meeting new capital expenditure out of revenue.¹ The Moçambique railway system works to a profit² owing largely to its guaranteed share in high-rate Transvaal traffic. Some of the past financial difficulties of the Rhodesian railway system have already been referred to.³ Since their capital was raised mainly on debentures, there is some analogy between the position of the British South Africa Company, which guaranteed the interest, and that of the governments which have incurred fixed interest charges on behalf of their railways; but in the case of the Rhodesias the burden of meeting these charges has fallen on the shareholders of the Company, not on the taxpayers of the two territories.

The Nyasaland railway system, although the capital at charge has been reduced by the assistance given by the Imperial Government, has involved the local administration in what may prove to be an onerous commitment for the payment of interest charges.⁴ The Uganda-Kenya system is self-supporting, though the high rates which it has been necessary to impose on freight have been held to prejudice the general development of the territory, and the situation would be gravely affected if the Imperial Government decided to make a charge on the sum of £5,502,592 which Kenya now enjoys without interest.⁵ Tanganyika Railways took over the German lines free of cost, and a considerable sum advanced by the Imperial Government to meet past deficits is excluded from their accounts; but the experience of the results of the depression period on traffic receipts shows that the system cannot be regarded as self-supporting.⁶ As regards the railway system of the Belgian Congo,⁷ there is little doubt that, with the exception of the *Chemin de Fer du Katanga*, the lines as a whole have not been able to pay

¹ S. H. Frankel, *op. cit.*, 1938, chap. v, p. 381.

² See above, p. 1569.

³ See above, pp. 1571-6.

⁴ See above, pp. 1576-8.

⁵ See above, p. 1582.

⁶ See above, p. 1579.

⁷ See above, pp. 1591-4.

interest without state assistance, and that during the depression period the necessity for implementing its guarantees imposed a heavy charge on the state. The manner in which the railways in French West African colonies present their accounts makes it difficult to determine how far they are really self-supporting;¹ the railway in the French Cameroons, a large part of which was taken from the Germans without payment, appears to be able to balance its accounts,² but it is probable that the Brazzaville Railway in Equatorial Africa, of which the cost of construction was exceptionally heavy,³ remains a charge on the revenues of the government. The Benguela Railway has not as yet earned a dividend. In Nigeria the capital at charge is being reduced by the expenditure on that section of the railways which was most noticeably in deficit; the fixed interest charge on the remainder of the system is being reduced, and it is possible that, with this assistance from general revenues, the railways may be able to present in the future a more balanced account.⁴ In view of the heavy deficits in past years, neither the Gold Coast nor the Sierra Leone Railways can be said to be self-supporting.⁵

Approximately half of the 'public listed capital' in British territories has been invested in railways; where, therefore, there has been a deficiency in the railway working, with the result that the general revenues have been obliged to implement the fixed interest on the capital at charge, it has made a serious reduction in the resources available for general expenditure. This has been felt the more because deficiency has often been caused by a depression in commodity prices which has reduced the general revenues without permitting any reduction in the recurring liabilities of the administration. There is nothing unreasonable in the proposition that the general revenues of a territory should bear part of the interest charges involved in the construction of its railway system; the debit arising may with propriety be treated as development expenditure, and the contribution made by the railways to the general advancement of the country may amply justify the state in undertaking this liability. The difficulty in adopting this procedure as a general practice does not lie in any question of principle;

¹ See above, p. 1589.

² See above, p. 1591.

³ See above, p. 1589.

⁴ See above, pp. 1585-6.

⁵ See above, pp. 1586-7.

it lies in the fact that in some territories the resources available make a further commitment of this nature impracticable. That, for instance, was the opinion recorded by Sir S. Armitage-Smith in his review of Tanganyika finances in 1932.¹

It has been suggested that the liabilities incurred by some administrations on their railway account might be reduced if railways were administered on more strictly commercial principles than is now the case. The suggestion raises questions of principle which it is not possible to discuss at length here, but it is of interest to note that the railways of which the policy is held to depart farthest from strictly commercial principles are not, in point of fact, those which are most conspicuous for deficiencies in revenue. Reference has been made elsewhere to the use made of the South African Railways to support agricultural interests in the Union,² and it has been asserted that some £14,000,000 out of the £17,000,000 spent on branch railways has been expended on unpayable lines largely in those interests. The employment of European labour as part of the 'civilized labour' policy has been said to cost the South African Railways £300,000 a year.³ That the railways are nevertheless self-supporting is said by critics of the system to be due to the fact that they have imposed freight charges which press with special severity on the gold-mining industry. Assuming this criticism to be correct, it is clear that there are some points of view from which the procedure might be objectionable; but judged purely as an operation in railway finance, it would not be open to objection unless it could be proved that the freight charges had affected the amount of ore raised or prejudiced the opening of new mines. As already shown, the Act of Union created an organization intended to prevent the use of the railways for the promotion of sectional interests.⁴ It is, however, clear that this object could not be attained merely by the separation of the railway finances from general revenues, nor by the appointment of a Railway Board, unless the constitution of the Board made it entirely independent of the Ministry,⁵ and the railways could obtain capital without recourse to loans from the state.

¹ Sir S. Armitage-Smith, *Report on a Financial Mission to Tanganyika*, Cmd. 4182, 1932.

² S. H. Frankel, *op. cit.*, 1928, paras. 90-1.

³ See Chap. XX, p. 1308.

⁴ See above, p. 570.

⁵ By s. 126 of the Act the commissioners are appointed by the executive government.

The system of financial control devised for the Rhodesian Railways,¹ based on the representation of different territories, appears well calculated to preserve the commercial character of the railways. The Kenya system has been used for purposes similar to those of South Africa, and there is here the added difficulty that the interests of Kenya and Uganda are far from being identical. The machinery of control now in force² does not appear adequate to provide a solution of these problems. In other British territories the criticism which can be levied against the railways is not that their policy is subjected to sectional influences, but that there has often been undue delay in establishing a self-contained railway account, namely one in which assistance given from general revenues to repair deficits will rank as an interest-bearing loan, and a surplus on the annual working will be taken to the renewals fund or the revenue reserve fund of the railway. Until this is done, the management has no incentive to economize in working costs, or to seek for new freight, or to make travelling more attractive to natives.

In the conditions of Africa, the construction of a railway from loan capital often has the effect of creating a mortgage on a marketable production which is not yet visible. There are instances in which a railway has quickly created its own traffic; a typical instance is the extension of groundnut cultivation in Northern Nigeria and in Senegal. In other instances, as for instance in Nyasaland, the increased facilities have been slow to produce a response in the form either of new cultivation or the expansion of existing marketable crops. That there are many areas in which traffic facilities are gravely insufficient is obvious; typical examples may be found in north Nyasaland, Tanganyika, the Northern Territories of the Gold Coast, French Equatorial Africa, and the northern areas of the French Cameroons. But at the moment the majority of the administrations would seem to have decided, in view of their experiences of the depression period, that the extension of railways should be deferred until the character of the probable return has been thoroughly explored. Almost everywhere they have preferred to extend the system of motor roads as an alternative to feeder branch lines. In the course of doing so

¹ See above, p. 1574.

² See above, pp. 1582-3.

they have opened much new country to the cultivation of marketable crops; the expansion of cotton cultivation in the Congo or French Equatorial Africa would, for instance, have been impossible without the motor road as auxiliary to the railway. The experience gained from the use of these roads will enable administrations to determine the economic radius of motor traffic in different conditions, such as cost of petrol (which is subject to wide differences in Africa), the requirements of African or Asiatic producers for traffic, and the like; information thus acquired will provide reliable data for deciding on the practicability of extending the railway system.

As has been shown, the development of motor traffic has in some areas given rise to a number of problems arising from the competition between the motor and rail systems. The competition is felt with special force where import and export rates are widely differentiated. Thus in Kenya exports cannot compete in world markets unless they are carried by the railways at rates which in some cases barely cover the cost of working, and this is made possible by high rates on imports. It is clear that unrestricted competition between transport undertakings is not in the general interest, and some form of regulation of transport must be regarded as essential for co-ordination. If road transport were allowed complete freedom in choice of load, it could undoubtedly undercut the high railway import rates existing in some territories; railways would then lose the revenue necessary to balance low export rates and a situation would arise that would result in heavy deficits, which would have to be made good, in the case of state railways, by the taxpayer. While the procedure used in Kenya of safeguarding the higher-rated railway traffic, by prohibiting the transport of goods, other than local produce, on roads which compete with railways, is held to be effective in present conditions, the expansion of the road system and consequently the existence of circuitous routes and roads alternative to the railways would gradually render it less easy to enforce without injustice to road transport services. One solution of the difficulty that has suggested itself is the creation of a combined monopoly of rail and road services, but this proposal has the great disadvantage that it removes an incentive to continuous improvement in efficiency,

and that it would necessarily affect ancillary road users. A second method suggested for dealing with the problem of competition is that of separate rail and road monopolies with a pooled financial interest; competitive traffic passing by road would pay as toll the amount which the railways would lose, that is, the difference between the railway rate and the out-of-pocket cost of working. The levying of a toll was rejected in Tanganyika owing to practical difficulties of control and to the expense of administration, and subsequent attempts to carry out the principle of a toll, by allowing vehicles to compete with the railway on payment of a high licensing fee, led to loss of revenue without effecting any rational division of traffic. It is interesting to note that elsewhere, notably in Australia, competitive motor vehicles are supertaxed to an extent varying with capacity. In France the proposed taxes on competitive road transport appear in principle to correspond more closely with a theoretical toll. The basis of solution envisaged for East Africa in the recent report of Sir Osborne Mance is protection of the railway monopoly, modified to allow of adaptation to changing conditions, namely, both by modifications in the railway rates and by the licensing of road transport competing with the railways.

The second aspect of transport development to which reference was made above is the need for the provision of communications for the service of purely internal trade. The absence of a developed money economy has, perhaps, tended in the past to obscure the need for facilities of this nature. Occasion has been taken when dealing with problems of Africa's internal economy to refer to the importance which attaches to the development of local markets.¹ The local market is the most potent agency for stimulating agricultural production, and for encouraging the specialization which is essential for the creation of local crafts or industries, as yet hardly existing in many parts of Africa. But over and above this, it is not perhaps generally realized that the larger finance of a country must have its basis in the innumerable petty transactions of small centres of this nature. The construction of the network of roads required for the establishment of local markets is an essential step in building up the economic structure of the territory.

¹ See Chap. XX, p. 1421.

CHAPTER XXIV

THE FUTURE OF AFRICAN STUDIES

IN previous chapters attention has been drawn to a number of instances in which there appeared to be need for closer co-ordination in the work of the technical departments operating in different British territories. Thus in regard to the geodetic survey, the compilation of meteorological data, the geological survey, and certain aspects of forestry and soil conservation work, it has been suggested that circumstances seem to call either for the creation of an administrative organization serving more than one territory, or for the institution of conferences or other measures which will secure that joint action is taken by different territories. These suggestions dealt largely with matters falling within the field of departmental administration, and only in a few cases touched on questions relating to research. It is not, however, proposed to pursue here the discussion of the measures required to secure co-ordination of the ordinary activities of the technical departments. The present chapter is limited to the consideration of questions relating to research, whether it be carried out by officers attached to those departments, or by other agencies in the colonies or in Europe.

I. THE SCOPE FOR RESEARCH INTO AFRICAN PROBLEMS

The term 'research' has in practice a wide connotation; it will be convenient here to use it as applying to those specific studies or investigations, in the field both of the social and of the physical sciences, which are undertaken with the purpose of providing a solution to the problems arising in connexion with the material or social development of Africa. These studies may be either of an abstract or (to use a convenient term) of a practical nature; nor indeed can the categories be separated, for it is not possible at any moment to say when an investigation undertaken in the most practical spirit may have to call on the resources of pure science, and it has more than once happened in Africa itself, that a study which appeared entirely theoretical has unexpectedly revealed facts of immediate and very practical use.

That Africa has problems of its own, which require intensive

study, needs perhaps no demonstration. The development of Africa is not a process of gradual evolution; it assumes, as has justly been observed, something of the character of a transformation,¹ and its achievement inevitably demands more than the routine application of existing knowledge. In practically every sphere of work on which this Survey has touched, problems present themselves which require the acquisition of exceptional knowledge, or the application of unusual measures. Thus the task of the health services is not merely to give protection against prevailing diseases; they must seek, in company with the soil chemist, for the factors in the soil which account for malnutrition, and must combine with the entomologist to explore the bionomics of the insect vectors of disease. Often the solution does not even lie in the application of any of the processes of medical science, but in the redistribution of populations in order to avoid contact with sources of infection, or in order to secure for them a better means of nutrition. Again, the objective of the veterinarian may be the cure and prevention of animal disease; but in seeking it, he will have at the same time to concert measures to prevent overstocking with its attendant dangers of devegetation and soil erosion. Even the introduction of mass education has its problem in an unusual diversity of languages, presenting a difficulty that can only be solved by an exceptionally complex study in linguistics. It would be easy to multiply these illustrations; but it may serve the purpose better to give some concrete examples of the special studies which the peculiar problems of Africa would seem to involve.

These examples would include the type of inquiry into social custom and into the effect of contact of African with European civilization which was discussed in Chapter II; the investigation of the linguistic conditions which regulate the choice between the alternative policies of adopting a 'union' language or recognizing a dominant dialect;² and an analysis of the factors necessary for the evolution of a uniform system of law, and a common judicial procedure suited to the requirements of Africa.³ Provision must be made for the examination of the traditional rights in land in different areas, as a guide to the development of a system under

¹ A. M. Carr-Saunders, *World Population*, 1936, p. 306.

² See Chap. III, pp. 81-99.

³ See Chap. VII, pp. 264-6.

which titles can be determined and recorded;¹ and for a study of such part of native social habit as has a bearing on the problems of nutrition, infant mortality, and the incidence of disease.² In the field of the applied sciences, research may be held to comprise studies into the factors of solar radiation which have a share in determining the adaptability of European people to life in tropical areas;³ the collection of bioclimatic data regarding the effect of climate on insect and plant life;⁴ a survey of the character of the water table in areas where well-boring is indicated as an aid to the redistribution of populations;⁵ and an investigation into measures for increasing the supply of fish and meat in order to provide elements which are so often deficient in the normal African diet.⁶

There is a wide field of study presented by the investigation into the factors on which depend the success of different methods advocated for preserving soil fertility in African conditions.⁷ We need, again, a fuller knowledge of the facts of evaporation and of plant transpiration, as a guide to the type of vegetal cover needed for the protection of water sources;⁸ a study of the effect of insect pests on wild animals, of the inter-relation of wild and domestic animals in respect of insect-borne disease, and of the bearing of periodic fluctuations in the wild animal population on diseases such as trypanosomiasis or rinderpest.⁹ It has been urged, again, that we need an extension of the study of systematic botany, and in particular the institution of herbaria, as an aid to research in the problems of agriculture and animal husbandry,¹⁰ or, to take another instance in the same field, the grant of further assistance to local forest staffs in the preparation of check lists and regional forest floras.¹¹ The completion of the arc of the 30th meridian does not perhaps fall under the head of research, but it is a matter not merely of scientific but of practical importance, as providing a basis for the triangulation on which topographical survey must depend.¹² On the economic side, we need, among other inquiries, a com-

¹ See Chap. XII, p. 877.

² See Chap. II, p. 58.

³ See Chap. I, p. 17.

⁴ See E. B. Worthington, *Science in Africa*, 1938, chap. iv.

⁵ See Chap. XV, pp. 1025 ff.

⁶ See E. B. Worthington, *op. cit.*, chap. ix.

⁷ See Chap. XIII, p. 960.

⁸ See Chap. XVI, p. 1061.

⁹ See E. B. Worthington, *op. cit.*, chap. viii.

¹⁰ *Ibid.*, chap. vi.

¹¹ See Chap. XIV, p. 1019.

¹² See E. B. Worthington, *op. cit.*, chap. ii.

prehensive study of the social effects of labour migrations,¹ and a fuller knowledge of the use of marketing systems in the development of native economy.² The list has been selected almost at random; but a study of Dr. E. B. Worthington's *Science in Africa*, published as a supplement to this Survey, will show that it could be widely extended. If it contains few references to the requirements of medical or agricultural research, it is because it appears unnecessary to give illustrations of needs which are at once so obvious and so insistent.

II. OFFICIAL INQUIRIES

It will doubtless have been remarked that the list does not make mention of those types of inquiry which are undertaken by governments in order to provide material for solving their immediate administrative problems. There are typical examples of such inquiries in the appointment of committees to investigate the problem of emigrant labour in Nyasaland,³ or the system of native taxation in Kenya.⁴ There have been some occasions on which inquiries of this character have not been directed to the solution of specific administrative problems, but have had a more detached character, such, for instance, as the studies made by government anthropologists in Nigeria and the Gold Coast, or those regarding native law and custom prepared under the direction of M. Brévié in the colonies of French West Africa.⁵ Inquiries of this nature fall into a somewhat different category from those which are made for the immediate purposes of the administration, and may well be included in that of research.

A wide range of official inquiries is obviously required in view of the novelty of the problems with which the African administrations are continually faced; it is worthy of comment, however, that few territories have an official cadre of a strength which permits them to provide on an adequate scale for the special investigations which they need. It has been of great advantage to India that a definite addition was made to its administrative cadre over and above the strength required by the fixed posts, thus providing a reserve of officers available for special work, including investigations of this type. It may perhaps be added that one of the more

¹ See Chap. XI, pp. 699 ff.

² See Chap. XX, pp. 1421 ff.

³ See Chap. XI, p. 701. ⁴ See Chap. X, p. 572. ⁵ See Chap. II, pp. 47, 50.

urgent tasks of the African colonial governments appears to be the compilation of local gazetteers containing the information required by Administrative and Departmental Officers when taking up a new charge. The District Note Books, of which some description has been given,¹ are far from complying with this requirement, which is of special importance in Africa, in view of the shortness of the official tours of service prevailing in many territories.

The methods followed in the presentation of information also appear to demand greater attention than they have hitherto received. It is not within the French tradition to publish annual reports of the proceedings of their colonial administrations, save in cases where the terms of a mandate make this necessary; the Belgians publish a comprehensive annual report for the Congo, but not reports from the different departments; the British publish annual reports both of administrative and departmental branches of work, and many of these are of great value, but the form in which they are embodied is often unsuitable. As has been pointed out, there is sometimes a failure to discriminate between information which is of public interest and that required solely for departmental use.² The annual reports of the British colonial governments on social and economic progress, and the reports of the British Medical, Agricultural, and Educational Departments follow a standard form, but a more uniform method in presenting reports on many other matters is also to be desired. It is not to be expected that the smaller dependencies should be able to provide the wealth of information which distinguishes the *Year Book* issued by the Statistical Department of the Union; but the British colonies might with advantage revise the selection of the very miscellaneous material collected in their annual Blue Books.

III. THE AGENCIES NOW RESPONSIBLE FOR RESEARCH

Returning to those studies which have been referred to under the general name of research, it is of importance to note the different agencies which are responsible for research in the physical sciences and the sources from which they draw their support. These agencies fall into three categories: international, imperial, and local. The Health Section of the League of Nations has organized

¹ *Ibid.*, p. 49.

² See Chap. XIII, p. 958.

research work of the first class, as, for example, in Uganda in 1926-7 in connexion with the problems of human trypanosomiasis, and now carries on an important study of malaria, tuberculosis, and leprosy.¹ Again, much of the survey work on yellow fever has been done by the International Health Division of the Rockefeller Foundation, which continues to subsidize investigation in Uganda. There is again an international organization for research into problems of locust control; in this case, however, each area carries out its own research, that for Great Britain being in the hands of the Locust Control Committee of the Economic Advisory Council,² which acts through the Imperial Institute of Entomology; other countries have now recognized the latter as the international centre for locust research.³ *The Office International d'Hygiène Publique*, created under the Rome Agreement of 1907, has a number of African delegates. The League of Nations permanent Commission on Biological Standardization has influenced the formation of the Biological Control Laboratory in Capetown for the standardization of vaccines and sera, which has been of considerable assistance to the medical and veterinary services. The International Institute of Agriculture at Rome is concerned rather with the compilation of information than with research.

The development of the imperial research services in Great Britain has a history of some significance in this connexion. Following on the 1851 Exhibition, the Imperial Institute was established in order to act as an institution for consultation, research, and information for the whole of the Empire. The Royal Botanic Gardens at Kew also acted as a centre for the dissemination of information on economic plants and their diseases; one of its most spectacular achievements was the part taken by it in the introduction of the rubber plant into Malaya. The Natural History section of the British Museum also became a centre of information for

¹ *League of Nations International Commission on Human Trypanosomiasis, Interim Report, 1927; Final Report, 1928.*

² See below, p. 1618, note 4.

³ The international organization has held conferences in Rome (1931), Paris (1932), London (1934), and Cairo (1936). In Great Britain the Committee of Civil Research started investigation regarding the desert locust; the field of research was extended in 1931 after the Economic Advisory Council took over the work. Field research in the Union is carried out by a special staff maintained by the Union Government; research in the colonies has been carried out under the direction of the Institute of Entomology by a staff maintained by a subvention from the colonies and from the Carnegie Corporation. (See E. B. Worthington, *op. cit.*, chap. x.)

zoological, botanical, and allied studies. But gradually distance, the growing importance of local production for export purposes, or the pressure of the producing interests concerned, led first the dominions and then the non-self-governing dependencies to increase their technical and scientific establishments, and to rely progressively on their own efforts. In part also the impetus came from even more imperative sources;¹ the epidemic of sleeping sickness in Uganda between 1901 and 1905 gave a stimulus to the research in fly-borne diseases; the spread of rinderpest among cattle in South Africa about 1900 led to the appointment of large numbers of veterinary officers by the Union of South Africa and the neighbouring territories; a series of invasions of locusts created an imperative demand for an organization to deal with methods of control.² In the meanwhile, however, a change was taking place in the mother country in regard to the value attached to the organization of scientific inquiry. Interest in the extension of research in the African colonies was strengthened by various influences, among which must be reckoned the position taken up by Mr. Joseph Chamberlain in regard to the study of tropical medicine. The growing feeling on the subject was further stimulated by the experiences of the Great War, and the liberal assistance given by the Empire Marketing Board to research in matters relating to agriculture and animal husbandry, while interest in the study of African social conditions has taken a new direction from the scrutiny to which the mandate system has subjected rival theories of native administration.

It is unnecessary to deal here with the numerous official and non-official organizations for research now existing in Great Britain, save in so far as they contribute also to research on African problems. In the first place, the scientific worker dealing with agricultural and kindred problems in the colonies has the advantage of the information collated and published by the Imperial Agricultural Bureaux established for that purpose in Great Britain. As the result of the Imperial Agricultural Research Conference of 1927, eight bureaux were established at recog-

¹ See Col. S. P. James, *Report on a Visit to Kenya and Uganda to advise on Anti-malarial Measures*, 1929.

² For the history of the creation of the scientific and technical services in the British colonies, see C. J. Jeffries, *The Colonial Empire and its Civil Service*, 1938.

nized centres in Great Britain dealing with different branches of agricultural research.¹ The older established Imperial Institute of Entomology and Imperial Mycological Institute came in 1934 under the control of the joint Executive Council, which since 1928 had regulated the other bureaux.² From these bureaux a large number of reviews, abstract journals, bibliographies, and bulletins containing original papers are regularly published, which serve to keep workers in touch not only with work done in the Empire, but with all other parts of the world. There are also information bureaux attached to institutions for other types of research; there is, for instance, among others, a Bureau of Hygiene and Tropical Diseases.³ In the second place, some of the imperial organizations have taken a part in originating research in Africa. The Economic Advisory Council,⁴ apart from its connexion with locust control, has also committees dealing with tsetse fly, with nutrition, and with dietetics. The first is the organizing centre for tsetse-fly research in East Africa; the last-named committees were responsible for the inquiry into the mineral content of natural pastures, which resulted in the establishment of the station at Naivasha (Kenya) in 1930, and organized the inquiry on nutrition among two of the Kenya tribes which was conducted between 1927 and 1931 by the staff of the Rowett Institute (Aberdeen) in association with officers of the Kenya Medical Service.⁵ In association with the Medical Research Council and the Colonial Office they have lately completed a report on nutrition in the British colonies (1938).

In view of what is said on the subject later, it is of interest to note the position of the three research organizations for which committees of the Privy Council are responsible. They are in-

¹ These include the Imperial Bureaux of Soil Science, Plant Genetics, Animal Nutrition, Animal Genetics, Animal Health, Agricultural Parasitology, Fruit Production. Imperial Bureaux of Forestry and of Dairying are being added as the result of recommendations made by the Commonwealth Scientific Conference of 1936. (*The Times*, July 26, 1938.)

² Imperial Agricultural Bureaux, *7th Report of the Executive Council*, 1935-6.

³ Supported by the Colonial Office. It has since 1931 issued the *Tropical Diseases Bulletin*.

⁴ The Economic Advisory Council reports to the Cabinet and has taken over the functions of the Committee of Civil Research; see Cmd. 3478, January 27, 1930.

⁵ J. R. Orr and J. L. Gilks, *The Physique and Health of two African Tribes*, Medical Research Council, *Studies of Nutrition*, 1931.

dependent but interconnected bodies, with a common chairman in the Lord President of the Council. The Department of Scientific and Industrial Research¹ and the Agricultural Research Council² are not at present directly concerned with research in the African colonies, though they remain in close touch with research institutions in the Union. Some aspects of the work of the former Department, and in particular that of the Food Investigation Board, carried out through the Low Temperature Research Station at Cambridge and the Ditton Laboratory at East Malling, are of particular interest to South Africa. Much of the research may ultimately be of value to other African territories, in particular that relating to the preservation of meat, fish, and fruit. The Medical Research Council³ has a more direct contact with African conditions through its Tropical Research Committee, which includes representatives of the Colonial Office, and of the London and Liverpool Schools of Tropical Medicine. This Committee has created a number of fellowships for tropical research, and has been responsible for investigation into yellow fever, sleeping sickness (Gambia and Tanganyika), yaws (Uganda), and the toxic principle in cassava (Nigeria).⁴ The Experimental Malaria Unit supported by it carries out studies on anti-malarial drugs which have a direct application to Africa. The African colonies will in the future have the assistance of the Colonial Empire Marketing Board created in 1937.⁵

The preceding chapters have given some details regarding the

¹ During the War a committee of the Privy Council was appointed to control the expenditure on scientific and industrial research; an Order in Council of July 28, 1915, created an Advisory Council, which is now in effect the body which manages the Department of Scientific and Industrial Research. Its gross expenditure for 1937 was £830,180. (Cmd. 5647.)

² A committee of the Privy Council was appointed in 1930 to deal with the organization of agricultural research and an Agricultural Research Council was incorporated by Royal Charter in 1931. It found a large number of state research institutions in existence, the votes of the two state departments of agriculture for research and advisory work amounting in 1937 to as much as £388,646, and it has only lately commenced to establish institutions of its own. Its estimates for 1937-8 were £79,510. (Cmd. 5768.)

³ As the result of a provision in the Ministry of Health Act, 1919, the funds provided for medical research are controlled by a committee of the Privy Council through the agency of the Medical Research Council, which was incorporated by Royal Charter in 1930. It should be noted that this is not an advisory body, but controls its own funds; the grant-in-aid for 1936-7 was £195,000. (Cmd. 5671.)

⁴ See Cmd. 5671, 1938, p. 159.

⁵ See Cmd. 5760, 1938, p. 25.

state, academic, or other institutions in Great Britain and the British African territories which are themselves actually engaged in research into African problems; but it may be of advantage briefly to resume that information here, confining the reference, however, to the institutions dealing with social, linguistic, agricultural, medical, and forest matters, and omitting, for the sake of brevity, those concerned specifically with geology, meteorology, zoology, and other studies. It may be said in advance that South Africa can be regarded as practically self-sufficient in the matter of certain types of research. In 1918 a Research Grant Board was appointed to advise the government regarding the encouragement of research in the Union and the administration of government grants in aid of it. A large number of well-equipped institutions have been created for the study of the problems of agriculture and animal husbandry, and the universities are also taking an active part in research of this type.¹

As regards research in the social sciences, most of the non-official field work recently done in British areas, other than the Union, has been directed by the International Institute of African Languages and Cultures,² which has recently also initiated, in association with the Medical Research Council and with the assistance of the Colonial Office, a combined study by a number of anthropological and scientific workers into nutrition conditions in Nyasaland. It is a departure which may have a marked effect on the future course of research in Africa. A scheme for co-operative research in Kenya has lately been undertaken by the Oxford University Social Studies Research Committee. A number of special studies have been supported by grants from the Rhodes Trust. The publications of the Royal Anthropological Institute, the International Institute of African Languages and Cultures, and the Royal African Society are important sources of information on African social studies. The staffs of the South African universities now carry on a number of special studies into native social life in the Union and High Commission Territories, but they no longer receive a subvention from the Union Government for the purpose. The Government of Northern Rhodesia has lately established

¹ *Official Year Book of the Union of South Africa*, 1937, pp. 389 and 956.

² See Chap. II, p. 51.

the Rhodes-Livingstone Memorial Institute, which will be largely devoted to anthropological work, but with this exception the administrations of the British colonies are not at present responsible for any organization of this character. In regard to linguistics, special study in the British colonial areas has, apart from the large body of work undertaken by missionaries, been mainly conducted by the London School of Oriental Studies, and by Fellows of the International Institute of African Languages and Cultures. It may be noted that the work both of the International Institute and the School of Oriental Studies is dependent on terminable grants from the Rockefeller Foundation, as is also the Oxford Social Studies Research Committee; if linguistic study is not adequately supported, students may have to resort to continental centres to pursue their studies. In the Union and Southern Rhodesia much original work in linguistics has been done by the South African universities. The extent to which studies have been instituted by different British administrations into questions connected with African customary law or land systems, has been explained in Chapters VII and XII.

In regard to agriculture, a worker in Africa could look for assistance from the Imperial Agricultural Bureaux already mentioned, from such bodies as the Advisory Council for Plant and Animal Products of the Imperial Institute, or from the Imperial College of Science and Technology;¹ and certain other bodies also take a more or less direct share in research in Africa. Thus the Royal Botanical Gardens at Kew and the British Museum (Natural History) have sent missions to Africa and done much valuable work in the preparation of reference books and the like. The most important of the institutions connected with the study of tropical agriculture, however, is the Imperial Agricultural College at Trinidad;² it is the recognized British centre for post-graduate training on the subject, and its Low Temperature Research Station is the only one situated in the tropics. Reference has been

¹ The college is the head-quarters for the study of insect pests in stored products, and receives subventions from some of the colonies and the Carnegie Corporation for this purpose. It has also been responsible for the examination of fibres and the like.

² Founded on the recommendation of a committee appointed by Lord Milner in 1919 (Cmd. 562); it is supported partly by an imperial grant and partly by subventions from the colonies and from commercial bodies.

made in Chapter XIII to the chain of experimental stations maintained by the Empire Cotton Growing Corporation, which have made a valuable contribution to the expansion in the production of cotton in Africa.¹ Local research on the problems of South African agriculture is well provided for by the large number of institutions established in the Union,² and each of the British colonies and protectorates has one or more of such institutions.³

These are of a varying degree of importance, and specialize for the most part in the problems of immediate urgency arising in their own territories; but there is in the Amani Agricultural Research Station (Tanganyika) an institution intended for agricultural research of a more prolonged and detached character than the staff of a local department could be expected to provide. Amani affords one of the many practical proofs of the emphasis which Germany placed on the necessity for a scientific approach in questions of colonial development. It was founded in 1902, with a scientist of high reputation in charge, and was intended to serve the same purpose as the Buitenzorg Institute of Java, which has had a remarkable influence on tropical agriculture in the Netherlands East Indies. The Amani station fell into desuetude after the War,⁴ but was reconstituted mainly as the result of recommendations made by the East African Commission of 1924, subsequently endorsed by the Lovat Committee on scientific research in the colonies which reported in 1927.⁵ The scale of the establishment is still below that required for a first-class institution.

In regard to the problems of animal husbandry, the Imperial Bureaux mentioned in Chapter XIII⁶ are also available as sources of information and advice to colonial workers. Africa itself possesses at Onderstepoort in the Union one of the most important veterinary laboratories in the world.⁷ Important researches into pasture

¹ See Chap. XIII, p. 945, and E. B. Worthington *op. cit.*, chap. xii. The original endowments of the Corporation came from the profits on the sale of Egyptian cotton during the War by the British Government; its income, approximately £75,000 a year, is derived mainly from a voluntary levy on the cotton imported for the Lancashire spinners.

² See Chap. XIII, p. 945, and E. B. Worthington, *op. cit.*, chap. xi.

³ See Chap. XIII, pp. 947-51, and E. B. Worthington, *op. cit.*, chap. xi.

⁴ It shared in this respect the fate of another important German institution, the Botanic Gardens at Victoria in the Cameroons.

⁵ Cmd. 2387 and Cmd. 2825.

⁶ See p. 944 and E. B. Worthington, *op. cit.*, chap. xiv.

⁷ Besides some endowments, Onderstepoort has an allocation of about £100,000 yearly.

grasses and certain other work affecting animal husbandry are carried out by the Division of Plant Industry at Pretoria and certain of the South African universities. There will be found in Chapter XIII a reference to the various institutions in the colonial territories which carry on the study of the questions affecting animal husbandry.¹

The Imperial Forestry Institute, to which reference has been made in Chapter XIV, is situated at Oxford. Its members have paid several visits to Africa, and the Institute has taken a considerable share in the identification of forest trees and the preparation of check lists.² The Forest Products Research Laboratory at Princes Risborough, maintained by the Department for Scientific and Industrial Research, and the Advisory Committee on Timbers of the Imperial Institute have both given direct assistance in research into forestry problems.

Research into problems connected with health has a wider range. Some mention has already been made of the connexion which different international organizations, and certain British institutions such as the Medical Research Council and the Bureau of Hygiene and Tropical Diseases, have established with medical research work in Africa. It may be added that the Royal Society sent a commission to Uganda to investigate sleeping sickness in 1903 and again in 1910, which resulted in the discovery that the disease was due to a trypanosome. But the British research institutions which remain in most regular contact with medical work in Africa are the London School of Hygiene and Tropical Medicine (with which the Ross Institute is now associated) and the Liverpool School of Tropical Medicine. The former, in addition to conducting in England general work bearing on African medical problems, maintained a mission for inquiry into certain aspects of trypanosomiasis at Gadau in Nigeria, and has also directed a special study in regard to blackwater fever and the helminthic diseases. The latter maintains the Sir Alfred Jones Laboratory at Freetown, which is conducting a survey of diseases prevalent in West Africa. There will be found in Chapter XVII details regarding the institutions for medical research in the Union, where

¹ See p. 947 and E. B. Worthington, *op. cit.*, chap. xiv.

² See E. B. Worthington, *op. cit.*, chap. vii.

the South African Institute for Medical Research at Johannesburg occupies a prominent position, especially in connexion with inquiries into silicosis, tuberculosis, and plague,¹ and also the various institutions in the British dependencies which are connected with research into health problems.² Reference will subsequently be made to the financial support given by Great Britain, through the Colonial Development Fund, to research of different kinds in the African colonies; the undertakings of chief importance to medical science supported by it in recent years are the special research into sleeping sickness and tsetse fly in Tanganyika Territory,³ and a malaria survey at Dar-es-Salaam. The British Empire Leprosy Relief Association has taken some part in the special study of leprosy.

IV. THE CENTRAL DIRECTION OF RESEARCH

The picture thus presented, though impressive in respect of the volume and variety of work in progress, nevertheless reflects the fact that research activities have in the past been frequently undertaken in response to an unrelated series of demands rather than as the outcome of comprehensive planning. Perhaps no area in the world offers more conspicuous proofs than are to be found in Africa of the necessity for recognizing the close interdependence of all scientific effort.⁴ From the ideal standpoint, all the agencies for research into problems arising in the African colonies should be closely co-ordinated, and the human and financial resources available should be apportioned by an authority capable of judging of the relative urgency of the different subjects requiring investigation. But little is to be gained by discussing here the possibility of giving practical effect to such an ideal. Writing on this subject in 1929, the Commission on Closer Union in East Africa regarded it as an accepted policy that scientific work for the Empire would come under central direction, with a chain of interconnected research stations based on central imperial institutions.⁵ The institutions for research in Great Britain have continued to grow in importance, but the policy by which the scientific work for the Empire would come under central direction has been

¹ See E. B. Worthington, *op. cit.*, chap. xv.

² *Ibid.*, chap. xv.

³ See Chap. XVII, p. 1132; E. B. Worthington, *op. cit.*, chap. xvi.

⁴ See, for illustrations of this, E. B. Worthington, *op. cit.*, chap. i.

⁵ *Report of the Commission on Closer Union of the Dependencies in Eastern and Central Africa*, Cmd. 3234, 1929, p. 133.

replaced by one of collaboration through the means of information supplied by the Imperial Bureaux, the assembling of Imperial Conferences, and the action of the Imperial Economic Committee.

So far as concerns the progress of scientific or other research in the African colonies, the study made in the course of this Survey suggests the following considerations. In the first place, whatever may be the position in regard to research organized by the universities or by scientific bodies, that which is undertaken for purposes such as those now under discussion may reasonably be regarded as 'commissioned', in the sense that the authority on whose behalf it is undertaken may properly indicate that one subject of inquiry should occupy attention in preference to others. But the co-ordination of research, in so far as it involves the indication of methods to be followed, or the apportionment of responsibility among different workers, must be entrusted to scientists, and more especially to those who have a position of prestige or authority in the particular subject which is to come under inquiry. The co-ordination of research cannot, in effect, connote the regulation of a large number of branches of investigation by one central executive authority; it implies only the process of devising, in association with the appropriate scientific authorities, the measures for making the most profitable use of the agencies concerned with any one particular branch of study, be it anthropology, medicine, or agriculture, and for maintaining the necessary contact between them and the agencies concerned with kindred branches of work.

It may at this point be of some advantage to summarize the procedure which has so far been followed in the attempts made to co-ordinate the work of research in African problems. We must take account in the first place of the influence exerted by the activities of special organizations, such as the Medical Research Council, the Tsetse Fly, Locust, Nutrition, and Dietetic Committees of the Economic Advisory Council, or the Health Section of the League of Nations. There is, in the second place, the influence of conferences which have been held, both in Great Britain and Africa itself, dealing with a variety of special interests. Of the former, reference has already been made to the Imperial Agricultural Research Conference of 1927; of others there may be mentioned the Imperial Botanic Conference of 1924, and the Commonwealth

Scientific Conference of 1936. There have been frequent conferences of the Survey Officers of the Empire, and there have been four Empire Forestry Conferences, of which one of considerable importance to the African colonies was held in South Africa in 1935. The most recent of the Empire Conferences (1938) has dealt with soil conservation, nutrition, and veterinary work.

Among conferences held in Africa, importance attaches to the meeting of the British Association for the Advancement of Science held at Capetown and Johannesburg in 1929, which aroused unusual interest in certain characteristic aspects of Africa, notably the mineral deficiencies of the soils and their effect on the problem of deficiency diseases. South Africa now has its own Royal Society and an Association for the Advancement of Science. The International Geological Conference met in South Africa in 1929. There was a conference of the representatives of the Health Services of African territories and British India at Capetown in 1932, and a Pan-African Health Conference met at Johannesburg in 1935, both held under the auspices of the Health Section of the League of Nations. There have also been a number of local conferences. In East Africa there have been regular meetings of heads of technical departments in connexion with the periodic Governors' Conferences, and a special interest attaches to those which have been convened to consider the question of the co-ordination of research, such as that held at Amani in 1931 to discuss the general reorganization of agricultural research, and those at Entebbe in 1933 and Nairobi in 1936 to discuss the co-ordination of medical research.¹

In the third place, account must be taken of the effect of the organization created in the British Colonial Office in order to assist the Secretary of State in his general direction of the policy

¹ As examples of other conferences may be mentioned that on research into trypanosomiasis (Entebbe, 1923); on soil chemistry (Amani, 1932, and Zanzibar, 1934); on research into tsetse and trypanosomiasis (Entebbe, 1934 and 1936); on the co-ordination of agricultural research and plant protection (1934 and 1936); on the co-ordination of veterinary research (1934); on the future of agricultural research (Amani, 1936); and on rinderpest (Nairobi, 1938), the last being attended by representatives of the Union and nine other territories. The West African conferences have been fewer in number, but there may be mentioned the meeting of West African Agricultural Officers at Ibadan (1927) and in the Gold Coast (1929); of soil chemists in 1930; and a Veterinary Conference at Vom, in Nigeria, in 1932, attended also by French representatives. A conference on yellow fever held at Dakar in French West Africa was attended by representatives from the British West African colonies.

of the technical and scientific departments in the colonies and protectorates. Mention has already been made of the fact that the Secretary of State now has the assistance of a number of Advisory Committees, and of his specialist Advisers.¹ The Advisory Medical Committee dates originally from 1909, the Advisory Committee on Education from 1923, the Advisory Council on Agriculture and Animal Health was instituted as the outcome of the report of the Lovat Committee of 1927, to which reference has already been made. The Colonial Forest Resources Development Department was created in 1936.² In the course of the chapters dealing with agriculture, health, forestry, and erosion some information has been given as to the extent to which the Colonial Office, with the aid of its Advisory Committees, can be considered as having been effective in the co-ordination of the work of the colonial scientific and technical departments. There can be no doubt as to the great value of the contribution which these committees have made to decisions on policy, but such practical measures of co-ordination as have been effected are perhaps due mainly to the influence of the Secretary of State's Advisers in the course of their tours in Africa.

All credit must be given for the achievements of the workers in the colonies, the more so as some of them were not expressly recruited for research work; it would be possible to quote many instances in which original studies made by them have had immediate results of great practical value. But the impression remains of a lack of direction in certain branches of work, and some duplication of effort;³ and it is noticeable that the Standing Medical Research Committee of East African territories has recommended the appointment of a Director of Medical Research for East Africa, in order to secure better use of the resources available.⁴ The East African Governors' Conference of 1937 had before it a similar proposal in regard to veterinary research. The influence exerted in the direction of co-ordination by the operations of

¹ The post of Legal Adviser goes back to 1867. That of Secretary to the Advisory Committee on Education was created in 1923, and a Joint Secretary was added in 1928; a Financial and Economic Adviser was appointed in 1925, and a Chief Medical Adviser in 1926, an Agricultural Adviser in 1929, a Forest Economist in 1936, and an Adviser on Labour in 1938.

² Some of the Advisers are not technically a part of the Colonial Office, a share of their salary being found from subventions from the colonies and other sources.

³ See *Report*, op. cit., Cmd. 3234, 1929, p. 133. ⁴ See Chap. XVII, pp. 1203-4.

the Colonial Development Fund is inconsiderable. In the first place, the Colonial Development Advisory Committee¹ takes account only of schemes which have initiated in the colonial administrations and have their support; in the second, the proportion of the resources of the fund which have been devoted to research was until recently of minor importance. From 1929, when the fund was established, up to 1938 the sums recommended for all colonies, including both loans and grants, totalled £7,284,682, of which £448,261 was classified as expended on scientific research; the average expenditure on the African colonies appears to form about 55 per cent. of the total expenditure from the fund.

In any attempt to ensure the better organization of work of this nature, great importance attaches to the possibility of securing that the research institutions of Great Britain should take a larger share in African research, as an alternative to the expansion of the establishments employed in the colonies. It will be remembered that under the system adopted in the French, and to some extent in the Belgian, territories research in colonial problems is carried out mainly through the agency of the metropolitan institutions, which dispatch 'missions' to Africa for the purpose, and where necessary utilize the services of the local staff as field workers.² It is possible that under such a system full regard may not always be paid to local needs, and the local staff may tend to lose some of its sense of initiative, but the procedure has at the same time certain advantages. A metropolitan research institution is more likely than is a colonial service to attract the services of men who have decided to make their career in research; they are detached from the responsibilities of purely routine work; and so long as they serve a central institution they share in that scientific atmosphere, at once critical and stimulating, which can so seldom be found in a colony. In a study which is of great value in considering the organization of colonial research, Sir John Russell³ has pointed out that 'there is no advantage in attempting to fuse scientific discovery with scientific exploitation'. If the metropolitan organiza-

¹ The Committee is a body nominated by, but independent of, the Colonial Office and makes recommendations direct to the Treasury for grants or loans to colonial administrations. See Chap. XX, p. 1321, for a further analysis of expenditure from the fund.

² See Chap. XVII, pp. 1171 ff.; E. B. Worthington, *op. cit.*, chap. xv.

³ *Report on the Work of the Imperial Council of Agricultural Research in India*, 1937, p. 4.

tions were to take a larger share in carrying out research, there would still remain for the specialist services in the colonies a wide field of scientific activity in dealing with the many immediate problems which arise in their department of work. In principle, therefore, there is much to be said for a system which would make a more extended use in Africa of the agency of the imperial research institutions.

In a matter which presents such obvious difficulties, concrete suggestions can be put forward only with some hesitation. There are two issues involved, first the furtherance of research in African problems, and second the provision of some effective means for making knowledge of Africa more accessible not only to the public but to those interested in the special study of African questions. As for the first point, it is hoped that there will be no difficulty in accepting the strength of the case put forward in this Survey for the extension of the existing facilities for research into African problems. We have now provided the framework on which social advance must be built up; in many areas we have made a substantial beginning in organizing the social services and in creating the institutions which will supply a training in local self-government. History will doubtless look back on this period as being the most critical stage of African development; errors that are made now for lack of the knowledge which a well-considered scheme of special study might supply may well create situations which the future can rectify only at the cost of great effort and much human distress. It has been well observed that in the undeveloped state of the greater part of Africa, the wide field which is offered for systematic inquiry promises rich rewards to those investigators whose measure of success is the consciousness of having made a further contribution to man's control of his environment; but it is equally true that every year which passes threatens to rob their effort of its value, since conditions are likely to develop which may make it progressively more difficult to apply the results of investigation and experiment.

V. THE CREATION OF A SPECIAL FUND FOR RESEARCH

It is not, however, feasible for the African colonies to make provision for research on the scale required, unless they receive liberal assistance from the British Treasury. There are, in the first place,

some territories which are so far from being able to finance further research that they can at present make little progress with the organization of their essential services.¹ In the second place, many of the problems which require investigation are not confined to one territory or even group of territories. Administrations which are already embarrassed to meet the many insistent demands on their finances may well be inclined to wait on the chance that their neighbours may originate inquiry, or, if they are asked to combine with others, may find that the resources available for work of this nature are already engaged, owing to pressure of some local need. It is, again, necessary to reckon with the tradition bred of hard experience in the development of African territories; it has been a constant struggle to provide their people, who are of low taxable capacity,² with the most rudimentary of the services which their introduction to civilization demands. It is inevitable that the many immediate necessities of the administrations should take precedence of provision for inquiry and research.

There are, however, certain facts which seem to justify an appeal to the British Treasury. At an earlier stage of colonial history, financial relations with the colonies were regulated by a policy which held that they should receive assistance from the Imperial Treasury only in exceptional circumstances, such as those created by military operations or the like. The analysis which has been made in Chapter XX of relations with the colonies in recent years shows that this policy no longer holds the field; the passing of the Colonial Development Act of 1929 gave statutory recognition to the obligation to assist the colonies at this period of their development. It should not be forgotten, again, that Great Britain when establishing the Empire Marketing Board in 1926 voted grants-in-aid of £1,000,000 annually, out of which large sums were expended on research into colonial problems of many different types. The provision which parliament made for scientific and industrial research in Great Britain, when the Privy Council Committees were first constituted in 1918, was an initial sum of £1,000,000, and the annual expenditure on the research conducted under their auspices now exceeds that sum.

¹ See analysis of the present financial position, Chap. XX, pp. 1432 ff.

² See the figures given in Chap. XX, p. 1433.

If an adequate provision could be secured for research in Africa, preferably in the form of an annual non-lapsing grant-in-aid, it is suggested that the most suitable body to administer it would be either a committee of the Privy Council or the Economic Advisory Council of the Cabinet. The different organizations for scientific inquiry for which these bodies are now responsible are in close touch with research institutions in Great Britain, and experience has shown that they have found no difficulty in working in the fullest collaboration with the Colonial Office or with executive authorities. It is possible that they would be able to establish easier relations with the Union or with foreign governments than would a body designed to deal solely with colonial matters. Again, no one can fail to be struck by the small part which the British universities have taken in the special study of matters concerning the colonies; a managing body such as that now suggested would be well suited to attract the necessary assistance from them. It is, finally, only an authority of this character which can move effectively in regard to certain classes of inquiry which do not attract the interest of any one administration in particular; the investigation into problems of nutrition has, for example, been due to the Economic Advisory Council, and there are other matters which seem to await the support of some similar body.

It is assumed that the body administering the fund would not institute research directly, but would operate through existing institutions in Great Britain already engaged in anthropological, linguistic, social, or scientific research, or through the medium of grants to colonial governments, after obtaining in the latter case the assent of the Secretary of State, who would necessarily be represented on the managing body. It may also be suggested that the managing authority would gain greatly by the periodic appointment of two travelling commissioners, representing respectively the scientific and social interests in research; their combined observations would assist it to judge the relative merits of different schemes presented to it.

Various schemes have from time to time been put forward for the closer co-ordination of local research activities in the African territories. A typical scheme of this nature is that considered by the Conference of East African Governors in 1937 for the co-ordination

of medical research. If, however, the suggestions which have just been made for the furtherance of research in colonial problems were accepted, there would be a certain range of inquiry which would in any case be largely undertaken by missions from the home institutions. For the rest, a distinction must be drawn between types of investigation which can profitably be centralized, of which the study of human and animal diseases is the best example, and those, such as agriculture and the stock-breeding side of animal husbandry, which can best be pursued in a variety of local institutions designed to take account of the diversity of soils and climate. In respect of medical research there is much to be said for the institution of an organization serving a group of territories, and supported by a self-contained fund, constituted by annual non-lapsing subventions from the group of colonies concerned. It is to be assumed that the amounts would be fixed for a term of years by legislative enactments, and the fund managed by a representative committee which would choose its own president. Research officers would either be obtained by the committee on deputation from the Colonial Medical Service, or engaged on contract for a term of years. This scheme would secure for local medical research the necessary continuity of resources and independence from routine work. Management by a committee which gave its president the necessary executive powers would possibly be more successful in the circumstances than the proposed appointment of a Director of Research. Such a scheme is equally applicable to veterinary research; it was indeed proposed at one time to centralize all veterinary research for East Africa at Kabete in Kenya.¹

It is very doubtful, however, if a scheme of this nature could be applied to agricultural research, or to experiments in stock breeding or similar activities connected with animal husbandry. In these spheres of investigation the work of the research student must constantly be checked by practical application, and there is always a danger that laboratory study may outrun the possibilities of use in the field; it would seem that, in India at all events, the stage has been reached at which the machinery for gaining more knowledge is working better than the machinery for utilizing it.²

¹ *Report*, op. cit., Cmd. 3234, 1929, p. 134.

² Sir John Russell, op. cit., pp. 3-6.

As already stated, some measure of co-ordination in agricultural investigation is already ensured by the visits of the Agricultural Adviser of the Secretary of State; for the rest, both here and in some other fields of work, the best solution is probably to be found in the systematic application of the procedure of local conferences.

Considerable importance attaches to the extent to which a Provincial Commissioner or similar administrative authority is placed in a position to co-ordinate the work of local departmental officers. Some of the general aspects of the subject have been discussed in Chapter VI; it must here be emphasized that the exercise of co-ordination must in this case be understood as implying only the formal power to require Departmental and Administrative Officers to meet in periodical conference, with an obligation to refer to competent authority the points on which agreement cannot be reached locally. The British system does not contemplate the more complete subordination of the departmental to the local administrative authorities which is usual under the French system.

VI. THE INSTITUTION OF A BUREAU OF INFORMATION

The second issue, to which reference was made on p. 1629, concerns the provision of means for making information concerning Africa more readily available. It has been seen that there are a number of journals which are devoted exclusively to social, linguistic, and similar studies of Africa, such as *Africa*, the *Journal of the Royal African Society*, or *Congo*; there are, in addition, certain journals published locally in the African colonies.¹ The publications issued from Brussels by the *Institut Colonial International* are a valuable source for the documentation of the legislative and similar proceedings of colonial governments,² and its periodical sessions have produced a useful series of discussions on different problems in administration. The bulletins of the Imperial Agricultural Bureaux and the journals and reports published by the medical and other research institutions in Great Britain contain full information of the progress of scientific investigation, though they do not as a rule distinguish the matters which particularly concern Africa. There is in addition a growing mass of general literature

¹ For details see Chap. II, p. 59.

² See in particular the *Annuaire de documentation coloniale comparée*, issued yearly.

on Africa; the formative period of Africa's history, unlike that of India, falls in an era when there is a wide public interest in the comparative study of human institutions. But these sources of information are very scattered; in some cases, as for instance in certain of the French and Portuguese territories, they are difficult of access, and in general there is a difficulty, to which the authors of this report can certainly bear testimony, in readily obtaining all the information required by those who take an interest in the economic or scientific aspects of African development.

We note in this connexion that the International Institute of African Languages and Cultures, though primarily engaged in promoting social and linguistic studies, has, through its affiliations in other countries, many advantages in obtaining information, especially on the subjects with which it mainly deals. On this ground, therefore, as well as on that of its value in organizing research, we hope that it may secure the support needed to enable it to continue and extend its work.

In the absence, however, of any agency qualified to fulfil all the purposes we have in view, we strongly advise the institution of an African Bureau, preferably situated in London, and designed on lines which would make it not only a source of information on practically every aspect of activity in Africa, but a convenient body to maintain close contact with institutions and voluntary organizations in this and other countries interested in African development. It should again be so constituted as to be capable of providing guidance to those who seek to pursue a special study in any subject of interest in Africa, or of placing them in touch with those who are competent to do so.

As outlined by us, the scheme contemplates the appointment, either honorary or part-time, of a director who should himself have some experience of the requirements of social or scientific investigation. He would have as assistants three specialists, acquainted with African conditions, and with knowledge respectively of scientific, economic, and social (including administrative) subjects. They would publish periodically a survey of contributions made to the knowledge of Africa, and of events which affect workers in any branch of study. Their own contribution, it is true, would not be the result of any original study; they would be deal-

ing with information, much of which would be recorded in some form or another elsewhere. But the Bureau would be a clearing-house of knowledge, and would carry the additional advantage that its staff would be capable of indicating sources of information which inquirers could otherwise obtain, if at all, only by a prolonged search, or as the result of a good deal of circumlocution. If it develops in the manner foreseen by us, the Bureau would form a common meeting-ground where personal contact could be established between those who desired to improve their knowledge of African affairs, and it might in time become the natural centre for discussion or conference between non-official bodies.

We have not ventured to put forward a figure for the cost of the major proposal recommended by us. Any estimate of the amount which should be considered appropriate must depend on the value which is, in the opinion of the British Government, to be attached to research in relation to the other forms of assistance which they can render to the colonies. It is of course obvious that of any sum available for this purpose a considerable part must in any case be devoted to purely material services or to the application of scientific processes whose operation requires no further investigation. Communications must be constructed, water supplies improved, educational institutions assisted, the accepted routine of medical, agricultural, and veterinary work must be extended. But there will nevertheless remain a large field in which provision is required for research; indeed, liberality in regard to some types of development expenditure may prove to be misplaced, in the absence of the special knowledge which research alone can provide.

In regard to our proposal for an African Bureau, we estimate the initial expenditure at about £10,000 a year, including the renting of suitable accommodation; this expenditure would doubtless increase if its work developed in the direction indicated by us. While we hope that this institution would receive full support from the British Government, we should prefer to see it controlled by a non-official body, which would be in a position to seek assistance also from colonial governments and from other sources.

CHAPTER XXV

SUMMARY AND CONCLUSIONS

I. THE PHYSICAL BACKGROUND

AFRICA's most important physical characteristic lies in the fact that it has a larger proportion of tropical area than any of the continents; from the human aspect its most striking feature is the fact that, with the exception of Australia, it has the lowest density of population in relation to its area. The first of these facts has a special significance in relation to the possible extension of European settlement in Africa. The land lying 3,000 feet above sea level is contained in a block which embraces the greater part of South and South-West Africa, and runs north-east as far as Abyssinia. But it must remain open to question, until further knowledge has been gained, whether the more tropical portions of the 3,000-foot plateau are suited for the permanent residence of a European population. It would certainly add to the knowledge necessary to form a judgment on this question were scientific studies undertaken of the effect of solar radiation and of equatorial climatic conditions on the health of Europeans; so far little has been done in this direction.

The low population density would seem to be connected in some measure with the existence of known deficiencies in the constitution of the soil, and with the prevalence of diseases facilitated by the malnutrition associated with such deficiencies. This fact gives special importance to the necessity for a scientific approach by the African governments to the interrelated problems of agriculture, animal husbandry, and health.

As regards our knowledge of the surface of Africa, a great number of areas still await a topographical survey sufficient to provide the mapping needed for the handling of social problems as well as for the work of material development. But it is first necessary to supply an adequate geodetic framework on which a successful topographical survey must rest; a correctly established system of triangulation is equally necessary for the cadastral survey of property, mineral rights, and the like. The arc of the 30th meridian,

begun at the Cape early in the century on the advice of Sir David Gill, has not yet been completed.

The extension of air communications to Africa has created an urgent need for the intensification and, above all, for the co-ordination of meteorological work.

II. THE AFRICAN PEOPLES

While there is no reason to question the correctness of the accepted derivation of the African peoples from three principal stocks, Bushmen, Negro, and Hamites, there has been no such anthropological survey as would enable a classification of tribes to be made on the basis of physical characters. The classification of tribes now in use follows for the most part differences in language and culture traits. For present purposes, however, a study of racial origins is of less importance than that of the reaction of African cultures to the influence of European civilization. The social anthropologist can fulfil a practical function by providing material which will enable the African governments, in directing their own policy, to see that the process of adjustment to new conditions shall cause as little disturbance as possible to African society.

The British administrations do not now give any direct support to the study of African social institutions by trained non-official workers; they might, however, find it to their advantage to utilize the services of anthropologists on prescribed lines of special study, working in association with their own officers.

Anthropological study has a further relevance in so far as observations made on African social life may be able to throw light on the existence of a characteristic African mentality. The view taken in this Survey is that the social conceptions and practices of Africans are the result of a natural process of accommodation to their economic and physical environment; there are few customs for which a parallel could not be found, either in the past or the present, among peoples similarly circumstanced. Their social conceptions do not therefore necessarily indicate any intrinsic difference of character or mental capacity between them and other peoples. Of recent years attempts have been made to find in the examination of the brains of Africans a basis for conclusions on their mental capacity.

It does not, however, appear possible to base on inquiries of this nature, or on the application of 'intelligence tests', any conclusion which will assist in the determination of general administrative policy.

III. THE STUDY OF AFRICAN LANGUAGES

It is customary to reckon the languages of Africa as 700 in number. Their diversity constitutes a problem of special difficulty when (as in the majority of British territories and the Belgian Congo) policy has determined that popular education shall be given through the medium of the vernacular. It is in such cases necessary to decide whether the language chosen shall be a dominant vernacular, or a lingua franca (like Swahili in East Africa), or a composite or 'union' language, such as is employed in parts of West Africa. The decision on this point is of importance in connexion with the encouragement given by the state to the production of text-books and the growth of a vernacular literature. A second problem lies in the need for finding a standard orthography to take the place of the variety of symbols used by those who first reduced the African languages to writing. For the solution of these problems an administration needs the assistance both of experts in linguistics and of those who can advise it as to the social consequences likely to follow any course recommended to it.

It is in Africa of special importance for the student to follow modern methods of study, including attention to the analysis of speech-sounds. While the standard of linguistic proficiency attained by some government officers is high, the British Government has hitherto given less support to institutions devoted to the study of African languages than, for instance, has the German Government, and it may further be questioned whether either the African governments or commercial firms attach sufficient importance to the attainment of linguistic efficiency by their servants.

IV. POPULATION RECORDS

In the last hundred years the estimates of the population of Africa have been as low as 28,000,000 and as high as 205,000,000; expert authority now limits itself to the view that the present total may lie between 138,100,000 and 163,300,000, a fact which affords

an indication of the value which scientific opinion attaches to the systems of enumeration now in use. In the present state of our knowledge, it is only possible to say that the African population is probably now either stationary, or subject to a very slow increase.

In recent years an increasing interest has been shown in census enumerations. In many cases, however, calculations, based on the number of male taxpayers or the like, still take the place of enumeration; it is indeed possible that greater accuracy will not be attained until Africa is able to call upon the services of a much larger number of literate enumerators. The conclusion is unfortunate, since more accurate vital statistics are essential in determining policy in such matters as the regulation of labour recruitment, or planning for education and health organization. Nor is it at present possible to check the correctness of many current assumptions, such as those relating to the extent of infantile mortality, or the effect on the birth-rate of African marriage customs.

It is suggested that administrations might, as a first step towards the improvement of their vital statistics, introduce a system of registration of births and deaths in all areas in which means can be found for ensuring a reasonable accuracy in registration.

V. POLITICAL AND SOCIAL OBJECTIVES

The presence of a considerable European element in some of the British territories has given to discussions on the political future of the British colonies a more concrete form than that taken by discussion regarding the French or Belgian possessions. The political future which British policy has assigned to the African colonies must be understood to be that of self-government based on representative institutions. The pursuance of this policy has involved the devolution of as large a share of authority as possible to the executive government of the colony and the recognition of local legislation as the source of law. Administrative policy generally gives the impression of being initiated by the local unit rather than directed from the centre. It is important to note the operation of these principles in regard to the development of a policy or native administration. In both West and East Africa the prevailing policy is now that of indirect rule. In West Africa there has been no European colonizing interest, and consequently less direct

impetus towards the development of responsible self-government than in East Africa; but the principles of indirect rule, if not incompatible with the ideal of self-government by representative institutions, are at all events so far alien to it as to suggest that native institutions must be materially modified if they are to fit into any scheme involving an elected parliament. In East Africa there is also a difficulty of another type: in areas such as Kenya or Northern Rhodesia, responsible self-government would normally involve either an arbitrarily arranged predominance of the European minority, or the political supremacy of the native majority. This is the problem which lies at the back of the many attempts, beginning with the White Paper of 1923, to find a formula which will enable Great Britain to maintain the ideal of responsible self-government, while at the same time remaining loyal to its obligations as trustee for native interests.

The objective of South Africa and Southern Rhodesia involves no such logical difficulties. Their aim is the preservation of the social and economic standards of European civilization, and in South Africa the supremacy of the European in these fields has its corollary in the political field, where the representation lately conceded to natives provides access to a consultative body, the Natives Representative Council, and not to the South African Parliament.

French policy does not envisage a future of self-government for her colonies; development is, in their case, regarded as fitting the colony to occupy in reality the position now assigned to it in principle as an integral part of France. The emphasis is, therefore, not on their securing a growing measure of political rights, but on their progressive access to French culture and legal institutions. The older colonial system, which foresaw a wide admission of native 'subjects' to French citizenship and a share in electing representatives to the French Parliament, has given place to one in which the access to French citizenship is greatly restricted, and the representation given to the great majority of Africans is confined to membership of consultative bodies. Former tradition still asserts itself, however, in the retention of a centralized system of administration, in which the main source of legislation is the ministerial decree, and in which executive devolution is a concession to the influence of personality rather than to principle.

Belgian colonial policy also avoids any conception of the Congo as a self-governing entity; on the other hand, it shows no tendency to regard it as a Belgium *outremer*. But policy only began to take shape after the Great War, and there are still many points on which it has not fully declared itself. The state has a direct interest as a shareholder in a large number of Congo enterprises and has paid great attention to the material development of the colony. The policy of material development is, however, combined with a conscientious recognition of the need for safeguarding the conditions of labour, promoting health organization, and improving the means of subsistence.

The objective of the Portuguese rule can be characterized more clearly when the reorganization introduced by the Colonial Act of August 1935 has come more fully into effect. The present government inherited an empire burdened with an unenviable tradition of mismanagement. The reconstruction carried out by Dr. Salazar's ministry is directed in the first place to securing financial stability; in political matters it is apparently intended to introduce gradually, and with modifications required by the state of native development, the corporative methods of the New State of Portugal. Loan funds have recently been secured to further the colonization of Angola, the Cinderella of the colonies.

VI. SYSTEMS OF GOVERNMENT

In South Africa the policy just outlined has resulted in recent years in the passing of a comprehensive series of measures intended to implement the principle of racial segregation. There has at the same time been an increasing recognition of the need to assist the native to develop himself within the separate but subordinate field which current policy assigns to him. In the British colonies the most important problem of a political nature which now faces the British Government is the question whether to give increased representation to Africans in the legislative councils and to concede the system of an elected majority; it must be realized that these measures might create a commitment to the grant, at some future date, of responsible self-government. The French system, as shown above, has in comparison a more clearly defined political objective. For the present there seems to be little in the

nature of political movement in the French African colonies; but only experience will show whether the more flexible character of the British system will not enable its institutions to adapt themselves more readily than those of the French colonies to the political situations which the future seems certain to entail.

An examination of the working of the mandatory system suggests that it is unlikely that it will result in establishing uniformity in methods of administration; its chief value lies not in its control of specific administrative policies, but in the publicity to which it subjects the mandatory governments.

Among the different proposals that have come under discussion for the regrouping of British administrative units, the most difficult is that connected with the scheme for federation in East Africa. It is clear that some greater co-ordination in administration is desirable. The obstacle lies less in the existence of a strong settler interest in Kenya, since allowance could doubtless be made for this in a suitably devised form of federation, than in the objection felt to bringing Tanganyika, as a mandated territory, into a federation of British possessions.

In the field of administration a difficult problem arises in regard to the co-ordination of the relations between the technical and administrative services. The development of Africa now depends on a progressive activity of the scientific and technical branches. The problem of co-ordination offers no great difficulty under the French system, but in the British colonies, where native administrations are taking a growing share in local government work, some method has still to be found which will place the Administrative Officer in a position to represent the interest of the native administrations without prejudicing the independence of the departments in technical matters. Some importance attaches to the suggestion that the technical departments should be suitably grouped under secretaries to the government.

The lack of continuity of administrative personnel, due to the constant transfer of officials, is a feature common to all African administrations; this problem has so far found no suitable solution.

As compared with other administrations, British officers appear to be unduly occupied with routine work. Both in administrative and technical branches the expansion of activity can only be

secured by the employment of educated Africans. France assigns a definite place to this class in her official cadres, and her educational system is specifically designed in order to produce it; but though a considerable number of Africans are employed in places of independent responsibility in British West Africa, the government has failed to issue any general statement of policy as to the extent or manner of their employment in the African dependencies.

VII. LAW AND JUSTICE

Native Africa had its own systems of customary law and of justice, chiefly designed to maintain the social equilibrium of the different societies of which Africa is composed. It is to be regretted that students of jurisprudence have paid little attention to the problems arising out of the introduction into Africa of a modern system of law, the chief purpose of which is to regulate behaviour in accordance with European concepts.

The most effective sanction which any system of law can command lies in evoking some measure of agreement from those to whom it is applied. This is, indeed, the chief problem for the lawgiver in Africa to-day. For the most part the governments, other than that of the Union at an earlier stage of its history, have interfered as little as possible with the African customary law regulating matrimonial relations, succession, and the like. In the second place, they have made an increasing use of the native court as an agency for trying most of the civil issues arising between natives, and all but the most serious criminal issues. The essential feature of the native court is that it tries issues by native law and retains its own customary procedure, a fact which accounts for its popularity over the statutory courts. As a result, two systems of justice may be said to exist side by side; and it is worthy of note that in some territories the cases decided by the native courts largely exceed in number those decided by the statutory courts. The quality of the justice dispensed by the traditional type of native court is, however, differently assessed by advocates of the direct and indirect systems of rule respectively.

The situation is one which gives rise to a number of difficult questions. Is it possible to evolve from these elements a homogeneous system of law for the whole territory? Is it, again, possible

to modify the procedure of the statutory courts so that they may convey to natives a better impression of their value as sources of justice? Is it possible to provide means by which native customary law can adjust itself to meet the needs of advancing society? Are the methods adopted for the administrative supervision of the native courts, in which admittedly lies the main guarantee for the quality of justice dispensed by them, adequate for the purpose?

The introduction of European law has substituted European types of penalty, and in particular fine and imprisonment, for the sanctions to which native society was accustomed. The African's acceptance of European justice is largely influenced by the views which he holds on the character of those punishments. But though means might with advantage be found for a fuller application of the principle of compensation, it is not easy to find a substitute for fine and imprisonment.

VIII. THE NON-EUROPEAN IMMIGRANT COMMUNITIES

The most conspicuous problem in connexion with these communities arises from the existence of Indians in South Africa and the British East African territories. It must be recognized that, so long as the principle of segregation is accepted in South Africa as regulating relations between the European and other races, Asiatics will share with Africans some of the disabilities which this policy imposes. Apart from disabilities in the matter of political or municipal representation, administrative policy is now felt most strongly by Indians in respect of the law regarding the holding of property in the Transvaal, and the discrimination shown in all four provinces in the application of the regulations regarding licences for trading.

The attitude in regard to Indians is likely to be influenced in the future by the fact that in South Africa increasing numbers of Indians are more interested in the attainment of Union citizenship than in their requirements as a separate community.

In East Africa discrimination is much less marked. The claims put forward by Indians are mainly in regard to the method of political representation, and (in Kenya) the administrative restriction on the holding of land in the Highlands. In these colonies

the future of Indians will be largely conditioned by the advance made by the African population, which has already invaded some of the fields of employment hitherto occupied by Indians.

IX. NATIVE ADMINISTRATION

Systems of native administration have everywhere started with the same history. The difficulty of administering large areas with small staffs obliged governments to make use of the native authorities; it was only at a later stage that they began to consider the type of agency best suited to assist in implementing their policies of material and social development. It was then that differing philosophies of rule led to the conscious adoption of different methods of native administration.

In the Union the future position of the native will be as resident of a state in which the dominant ideals will be those of Europeans; it is possible that the procedure of direct rule, and the policy which prescribes the use of the council as the organ of native local government, are best suited for his peculiar situation. In Southern Rhodesia the regulation of native affairs is still in process of evolution, but policy appears likely to follow that of the Union so far, at all events, as regards the preference for the council system. In Kenya a fully developed system, based on District Councils presided over by an Administrative Officer, with nominated native tribunals, had its origin in a lack of confidence in the capacity of traditional authorities. It is possible that this system is best adapted to the areas in close contact with European settlement, but not necessarily to all parts of Kenya. In French territories the adoption of the principle of direct rule is a natural consequence of the policy which looks to the progressive association of the African with French institutions. But it is now recognized that, where use is made of native authorities as agents of the administration, they should be as far as possible the traditional authorities accepted by the people. In the French view, the great value of their system lies in the fact that it is well fitted to ensure the progressive adjustment of native institutions to changing conditions, and that it makes a strong appeal to the educated class. The Belgian system of native administration, as yet in a state of transition, now assigns to traditional authorities a position which resembles that given to them in

the British system of indirect rule; the scale of powers allowed to them is, however, less than in British territories.

In British colonial areas other than those mentioned the prevailing policy is that of indirect rule. Based on the recognition of traditional sources of authority, such as the chief or group, its most significant innovation lies in the grant to them of financial and executive powers for the purposes of local government. The native authority therefore has full scope for gaining in a defined field, and under official supervision, experience in the exercise of authority, both executive and judicial. The 'native administrations' are perhaps less effective agencies for rapid development than those employed by direct rule; but supporters of the system claim that these disadvantages are outweighed by the greater readiness of the governed to accept innovations which are introduced through the agency of their own authorities. In many areas the system has been far more successful in its working than the procedure of native administration formerly in use; but its real test will come when the traditional native authorities are faced with the necessity of introducing social services on something more than the rudimentary scale to which they are now accustomed. It will be subject to a further test with the growth of political and national aspirations in Africa. The system, as it now operates, results in a series of isolated efforts at local government with no connecting link or means for voicing general opinion, such as the Natives Representative Council of the Union may ultimately provide. Up to the present time the fact that the system makes little provision for recognizing educated opinion has not resulted in open opposition to it; in the future, however, it will inevitably have to meet pressure due to this cause.

The growth of urban communities raises a special problem of local government which extends beyond the necessity for providing housing and social amenities. One of the gravest problems of the future will be the development of a legal and administrative system which will provide for the rapidly growing class whose social life is not assimilated to that of the European, but which cannot be suitably regulated by tribal institutions. It is a problem which so far has engaged more attention in the Union and the Belgian Congo than in the British colonies.

X. SYSTEMS OF DIRECT TAXATION

The need for money for taxation is not the sole cause which produces migration in search of wages and the consequent disturbance of social conditions; the normal economic incentive now operates fully in many parts of Africa. Nevertheless, the present systems of taxation have an effect on the native population which necessitates careful consideration of the form taxation should take. Only in the southern area of the Gold Coast has it been possible to dispense with a direct tax; elsewhere native taxation exists either in the form of the Nigerian system of 'lump-sum assessment' on a village or similar unit, or a poll tax, or a combined hut and poll tax, which in some cases is graduated according to local circumstances, and in others is a rigid flat rate over a whole territory.

Apart from difficulties in collection, which were very marked during the depression period, the growing measure of differentiation in African social economy points to the need for a closer relation between taxation and individual income. It is possible that the Nigerian system, which allows of the consideration of individual circumstances in distributing the lump assessment, may be applicable elsewhere to settled areas which are not dependent on outside wage earning. In areas where wage earning is usual, the introduction of systems of territorial graduation, and means for assuring flexibility in collection, require careful study. The need for more equitable assessment is especially noticeable in non-tribal and urban areas, where a rigid flat rate must produce great anomalies.

XI. THE PROBLEMS OF LABOUR

In the past the demands for tax, and in some areas a degree of compulsion, played a predominant part in the introduction of the African people to European industrial undertakings. As has just been stated, however, the normal economic incentive is now an influence of increasing strength. Compulsion may be said to be confined to narrow limits, being only used by native authorities for communal purposes, or by governments for urgent reasons, or as a partial alternative to the direct tax. Nowhere is acknowledgment given to a system in which labour is compulsorily obtained for private purposes.

The deficiency of labour, which was in earlier days a distinguishing feature of African labour problems, still exists in some areas, but arises more from the fact that the demand of industrial concerns exceeds local supplies of labour than from an unwillingness to enter wage employment. Labour supply is in some areas influenced by the extension of marketable cultivation, and unless a population exists which cannot gain from agriculture the income it needs, employers can only attract labourers by the normal process of improving conditions of employment. In the long run, however, the expansion of marketable production is more likely than is the pursuit of a subsistence economy to produce the additional labour required for industrial development.

Among the general problems which an administration may now have to consider, is the advisability of restricting the employment of labour from certain areas owing to health or social conditions, and the necessity for stimulating the cultivation of subsistence crops where natives have become unduly dependent on wage earning. The Belgian Government may be said to have taken the lead in the study of questions of this type. It is, again, necessary to consider the extension of social services, and some system of provision during unemployment, in the large resident aggregations of natives collected for the purpose of wage-earning and for whose conditions of living industrial concerns have no responsibility. This type of problem exists in especial force in the Union.

The repercussion in other territories, where there are strong European interests, of the Union policy of confining the native to the field of unskilled labour, involves problems which may assume greater proportions as Africans become more alive to their importance in the modern industrial economy. Hitherto capitalist enterprise has been able to count on relatively cheap labour, owing to the fact that wages are for the most part sought for other reasons than that of subsistence. In some areas, the numbers are rapidly increasing of those who are entirely dependent on their wage-earning, and this fact may materially affect the relations of employers and labour. There is as yet little evidence of the growth of a common consciousness among African wage-earners, but the possibility of the combination of African labour in unions or otherwise is one which cannot be ignored.

XII. THE LAND

The policy adopted by governments towards land in Africa was at one period determined by their own conception of the economic use to which land could be put, rather than by considerations regarding the nature of native rights. Their immediate need was the development of resources, which in some areas seemed likely to be achieved by the establishment of a European population, involving the alienation of large areas of land, in others by capitalist undertakings demanding monopolist or similar rights over the produce of the land, and finally in others by the activities of the native population itself, in which case little alienation of land was required. The precise form used by any state in asserting rights for itself, or in recognizing those of natives, was liable to vary according to these circumstances.

The consequences of alienation of land are most conspicuous where native occupation has been confined to reserves demarcated in order to meet the requirements of European colonization. It is, however, unlikely that circumstances will now arise which will make governments again desirous of acquiring land on so large a scale for European settlement. At the present day there are two principal issues regarding land which call for notice. The first relates to the nature of the legal rights which states have established, by legislation or otherwise, over lands which remain in native occupation, and to the precautions which they take to protect the rights of occupiers when acquiring native land for public purposes, or for the establishment of private industrial enterprises. The second problem relates to the type of legal title which the state is prepared to recognize in favour of individuals, over lands now held on customary native tenures.

As to the first point, the present position is, in general terms, that in certain British West African territories and in some smaller areas, such as Buganda, it has been recognized that all lands are native property over which, accordingly, the state can claim no rights. Elsewhere, however, in British as well as French and Belgian territories, the state can in effect expropriate any lands over which it has not given or recognized a title—in other words, the great majority of lands in native occupation; the restrictions

on its action exist only in the form of executive regulations, or, as in the case of reserves in British territories, depend on the assent of the executive bodies who are statutory trustees for these lands. Great importance attaches, therefore, to the character of the regulations or instructions which control the action of the local authority in dealing with native lands.

As regards the second point, the communal system of landholding, using the term 'communal' in the special sense which it possesses in Africa, still prevails in the greater part of the continent. There are, however, areas in which the right of user is becoming more exclusive; in a further relatively small area, a custom has grown up of the allocation of land for individual usage; in some cases leases and sales are recognized. It is clear, however, that usufruct remains the prevailing conception. Over the greater part of Africa it would be premature to take steps to give legal recognition to individual titles; but circumstances (including the need for using land as a basis for credit) will before long make it necessary to undertake this process in some of the more economically advanced areas. There is some difference of opinion, particularly as between French and British authorities, as to the form in which individual title should be recognized; but experience elsewhere as to the necessity for preventing agricultural indebtedness and the fragmentation of land appears to make it advisable that title, at this stage, should be of the nature of 'occupancy' or have a character which, while allowing of the exercise of all the rights of ownership, would limit the power of encumbrance and transfer.

XIII. AGRICULTURE AND ANIMAL HUSBANDRY

At an earlier stage in the history of the agricultural departments attention was largely directed to finding means for increasing the production of export crops. A variety of causes has tended of late years to emphasize the need for the improvement of native subsistence crops. Native agriculture is for the most part based on the system of shifting cultivation. This system is in itself a natural adjustment to the needs of African soils, which require a considerable period for regeneration after cropping, and though it has in the past caused great destruction of high forest, its normal use is not necessarily harmful in other conditions. The settlement of

population in fixed areas, and the pressure on the soil due to the expansion of economic crops, have, however, led to the use of the system in an abnormal manner, with the result that the period of regeneration is unduly curtailed and the vegetal cover destroyed.

As regards animal husbandry, the salient facts are that, over large parts of Africa, tsetse fly makes it impossible to keep domestic cattle; and that in other large areas, particularly in South and East Africa, native custom attaches a semi-religious value to cattle, with the result that overstocking is liable to cause great destruction of pasture and to produce soil erosion.

So far, then, as regards the improvement of native agriculture, the first effort must be to indicate some alternative method for the regeneration of the soil after cropping. Of the different methods examined, one of the most promising appears to be that of mixed farming. Its success, however, will depend on the efforts made to secure protection from infection in tsetse fly areas, and to secure a more economic use of cattle by natives elsewhere. Here, as in many other respects, the departments which deal with agriculture and animal husbandry have a common field of work. The difficulties which lie in the way of the general adoption of mixed farming point to the need for considering other alternatives to the present methods of shifting cultivation, such as green-manuring, composting, or the like. There are, again, problems of a somewhat different class, such as the relief of the more congested areas by redistribution of population, for which provision of water supplies is often required, or the preservation of pastures by introducing a system of rotational grazing. Although native methods of agriculture are rooted in social custom, past experience shows that new methods will be accepted by the people if these can be demonstrated to be adapted to their circumstances.

The question regarding the relative merits of the 'peasant' and 'plantation' system of production is one of the outstanding issues of African economics. It must be realized, however, that there is only a limited field within which the issue has any reality. Certain export crops do not provide an adequate return for capitalist production; there are others in which peasant production can hold its own when quality is safeguarded by official supervision of cultivation or of marketing conditions. There remain a few products for

which 'plantation' methods seem likely to secure a better market. The question whether their production should be encouraged by provision of land or the like is in the last resort mainly one for decision on political as much as on economic considerations.

XIV. FORESTS

In Africa, forests have a function in conserving water supplies and climatic conditions which is often of greater importance than that which they exercise as sources for the supply of timber. The progressive deforestation caused by human action demonstrates the need for expanding the forestry régime in a number of the African territories; but circumstances at the same time require that every effort should be made to secure the co-operation of Africans themselves in the preservation of their woodlands. The creation of a cadre of qualified African assistants, which is in any case necessary for the expansion of forest work, would also contribute to this result. Some governments have sought the co-operation of Africans by establishing 'village forests' and by entrusting the management of reserved areas to 'native administrations'. Some further experience of the operation of the latter measure is, however, required.

In the Union, a policy of afforestation in a territory lacking extensive indigenous timbers has been actively pursued. In British colonial areas the vast extent of thinly populated woodlands presents special difficulties of control, and the forestry staffs, owing to their smallness, have been mainly occupied on problems relating to commercial exploitation. Of French territories, only the Ivory Coast has an effective forestry régime, mostly in connexion with the exploitation of its valuable high forests. In the Congo forestry control has only recently begun. In most territories the immediate need appears to be for a more complete reconnaissance, in order to determine the limits of possible reservation, and also to gain fuller information as to the stocking of the forests with commercial timber.

XV. THE PROBLEMS OF WATER SUPPLY

In very few areas are the conditions of Africa favourable to the construction of large-scale irrigation works, and efforts to improve water supplies must for the most part be confined to inexpensive

methods of rain storage, the provision of drinking water as an aid to the expansion of cultivation, and comparatively small irrigation works. Though South Africa has undertaken some important irrigation works, they have seldom proved remunerative; on the other hand, the importance of water supply to the cattle and sheep industry of the Union has led to the adoption of a policy involving considerable expenditure on the boring of water holes, as well as the subsidizing of dam building by farmers. In most British colonial areas activity centres on the provision of drinking-water supplies, on which the fuller use of native lands largely depends. In French colonies the supply of drinking water forms the main problem, but interest also attaches to the scheme of irrigation in the Niger basin, a work of first-class importance, now approaching completion.

XVI. EROSION

It is not always easy to distinguish erosion due to the action of man from that occasioned by nature; and some discussions on the subject appear to be directed rather towards convicting man of his sins than to ascertaining how much of the mischief done either by nature or by man is capable of remedy. But it is clear that in Africa the process of erosion, caused by shifting cultivation and by overstocking, has been accelerated by modern conditions under which populations are concentrated, more extensive areas of land are cultivated, and the increase of stock is more rapid. The provision of means to counteract the mischief thus done is now one of the most serious problems of Africa, nor can it be said that adequate remedial measures have yet been taken in any territory. It may be added that there appears to be a need for a closer co-ordination of policy between different British territories than exists at present.

XVII. HEALTH

There are no reliable statistics which would enable a comparison to be made between Africa and other territories in respect of the prevalence of disease. The fact remains, however, that malnutrition is a characteristic feature of many parts of Africa; there are low standards of hygiene in many rural areas and in most urban native locations, and there is a marked prevalence of malaria, sleeping sickness, venereal disease, and different forms of

helminthic disorders. Civilization is responsible for part of the mischief it is seeking to remedy; the increasing contact between peoples hitherto living in isolated groups, as well as industrialization, have introduced new problems in the spread of disease.

Policy varies regarding the manner in which the narrow resources available can best be used for the prevention and cure of disease. The French rely largely on a system of medical centres with attached dispensaries and mobile medical units. The Belgians rely on intensive methods of attack on affected areas with the view of clearing them up before handing them over to the care of the normal medical and health services. In the Union and in British territories, policy has favoured the less elastic system of hospitals and outlying dispensaries. In Nigeria the use of a mobile system resembling that of the French territories is now being adopted, in order to deal with an outbreak of sleeping sickness. There seems good reason to hold that the mass infliction of disease of the type existing in Africa demands more direct methods of attack than have hitherto been employed in British territories; that funds should be devoted to organizing intensive medical campaigns rather than to the perfecting of the hospital system, and that, if necessary, statutory powers should be taken to secure that persons suffering from disease should submit to the necessary medical treatment.

The task of the health services in Africa, however, extends beyond the application of modern scientific technique for the prevention and cure of disease; they share in the responsibility of other social services for the improvement of African conditions of life, and their part is the more important because they are concerned with some of the fundamental problems of Africa, such as that of nutrition.

There are in the government service of the British West African colonies over thirty African medical men, with full qualifications gained in Europe. But for the extension of medical work in Africa it is more important to expand the cadre of locally trained medical assistants. France has led the way in the training of this class at Dakar, and in British territories the existing provision will now be increased by the courses instituted at Yaba in Nigeria, Mulago in Uganda, and Fort Hare in the Union.

XVIII. EDUCATION

Only of recent years has systematic thought been given to the form which native education should take in Africa. At an earlier stage opinions as to the instruction to be given were influenced by considerations other than those of educational policy; thus in the Union official opinion would have given to Africans only the instruction suitable for those whose future lay in subordinate positions in European employment, while missionary opinion favoured an education of a European type, as a symbol of native right to equal treatment. In the British colonies, education was left largely in the hands of missionary bodies, and government policy could hardly be said to have declared itself. A change came with the recognition by the government that education must be progressively extended throughout the population. It was recognized that a type of education must be devised suited to the mass of the people; the character of the advanced education to be given to the few must be determined by the choice made, on general grounds, between the alternative policies of keeping higher instruction on a vocational plane, or giving advanced education of a general type to as many Africans as possible.

As a result the educational system in the Union is now coming under revision; current policy appears to indicate the vernacular as the most suitable medium for popular education. In the British colonies the vernacular is now the accepted medium in popular instruction, and an effort is being made to give school courses a content suited to African environment. But native education is still in its initial stages, and the wider employment of Africans in the public services is delayed owing to the lack of candidates fit to receive special training for their work. In only a few areas do more than a small proportion of children of school-going age receive any instruction, and few pass beyond the elementary standards. Primary education is still left to a large extent to missionary bodies; and much of it is necessarily in the hands of inadequately trained teachers.

The most pressing need in regard to popular education in British territories appears to be an effort to make the present policy more effective by providing better means of control and improving

the standards of teaching. As regards advanced education, while present policy recognizes the need for broadening the basis of pre-vocational instruction, the tendency, as shown for example at Makerere and Yaba, is to give preference to advanced instruction of the vocational type. But the future of advanced education must remain in some doubt, until the governments arrive at some definite policy on the position which the native is to occupy in the administrative and technical departments, particularly in areas under a system of indirect rule.

In the French colonies education forms an essential feature in the policy of 'association'. A carefully devised system separates the *élite* from the mass, giving the former a training which engages their sympathy with French culture and makes them efficient 'auxiliaries' in the work of administration. Advanced education is almost entirely confined to supplying the requirements of the government services, a policy which secures that there is no surplus of educated but unemployed Africans. The education given to the mass is as far as possible vocational, and the language of instruction is French. The system is efficient, and any judgment of its value must depend on the view held of the merits of the alternative policies of associating Africans as closely as possible with European civilization, or of assisting them in the evolution of their own characteristic culture.

The chief characteristic of Belgian education is its effort to improve the African's capacity for the work of developing the Congo. Popular education is conducted in the vernacular; there is a strong emphasis on manual training, agricultural instruction, and the like, and higher education is vocational in character.

In the British territories an effort is now being made to test the value of the cinema and broadcasting for influencing large illiterate populations in matters of health and agriculture. Attention is also being directed to the supply of literature, in the form both of vernacular papers and books.

XIX. THE EXTERNAL ASPECT OF ECONOMIC DEVELOPMENT

The continent of Africa as a whole has only a small share in the world's production; it has 4·5 per cent. of the world's export and 4·8 per cent. of the import trade. But Africa has, on the other

hand, a large proportion of the production of certain particular commodities, such as gold, diamonds, chrome ore, palm oil, groundnuts, cocoa, and sisal. Certain of these products have required a large capital outlay to develop, and others have been able to come on the world's market only after government or private enterprise has raised the capital needed for expenditure on communications. The development of Africa has from the first made heavy demands on the supply of outside capital. It is estimated that the total investment in the part of Africa with which we are concerned amounts to £1,222,000,000, of which a large proportion has come from British investors; of this sum, £546,000,000 has taken the form of loans or grants to governments. About 75 per cent. of the total loans raised by governments of British territories was for railway purposes.

Except in the Union it is not easy to foresee a time when foreign obligations will be converted into internal debt, or when the capital necessary for development will be produced locally. Save, however, for possible mineral development, there do not appear to be projects of any magnitude which will in the near future demand an extensive supply of foreign capital. If so, the future addition to Africa's foreign debt is likely to take the form of investments of the 'equity' type rather than of fixed-charge government securities.

The high proportion of fixed-interest obligations of certain of the territories has had a serious effect on their economic position, especially in periods of falling demand. There are now some governments which have to face so heavy a charge on this account as to make it inadvisable for them to attempt to raise fresh loans for development purposes, and if the pace of internal development is to be quickened, it can only be as the result of assistance in the form of free grants from the imperial power which controls them.

XX. THE INTERNAL ASPECT OF ECONOMIC DEVELOPMENT

Africa may be said to have two systems of economy, the European and the native, which meet at the point where the native begins to work for wages in European undertakings, or to take export crops to market. The European type of economy exists in its most complete form in the Union. Here the maintenance of the economic and also the social structure in its present form has been

made possible by the success of the mining industry; what mining has meant to South Africa is best indicated by the fact that up to 1937 the Union had produced minerals (including gold) up to the value of £2,000,000,000. The extent to which agriculture, even now relatively unremunerative and partly dependent on state aid (made possible by taxing the profits of mining), or the secondary industries (which are based largely on the needs of the mining population) would survive a serious decline in mining, is a matter mainly of speculative interest; it is, however, certain that the economic structure would have to undergo a readjustment so far-reaching as to have serious reactions on the social structure. In both the Rhodesias the future of European agriculture is (save possibly for the production of tobacco) also closely linked with that of mining. In East Africa mining is of far less importance in the general economy. It would seem that here European agriculture can only survive competition with native production when it is artificially supported by tariffs or the like, or where special conditions prevail, as for example in the case of sisal, tea, and some types of dairying. The tendency in the future may therefore be for Europeans to move away from general agriculture into commerce or various forms of non-agricultural enterprises.

In the Congo, and in French and British West Africa, farming forms a smaller part of the economy of Europeans, who will doubtless continue to be concerned chiefly with mining or commerce, or the management of plantations. Everywhere, therefore, the progress of the European system of economy is likely in the future to be linked up with the exploitation of mines, with commerce, and with certain specialized forms of agricultural production, generally requiring capital for their development. Save in South Africa and Southern Rhodesia, European enterprise is likely to engage the energies of a special class, non-resident in character, not primarily concerned with retail trade or with occupations involving manual labour.

The native economy includes the large section engaged solely in subsistence production, the growing number concerned also in the cultivation of export crops, and finally that section which combines these forms of production with wage-earning in Euro-

pean undertakings. It is an important fact that a large proportion of such wage-earning is 'part-time' in the sense that family subsistence is drawn from other sources; but in some areas, notably the Union, the situation is undergoing a change involving far-reaching consequences, owing to the growth of a class which is increasingly dependent for subsistence on wage-earning. It will be seen that the native economy, as above described, contains no specialized commercial or trading class; only in West Africa could it be said that such a class exists, but even there the class is not fully specialized. It is mainly in the West, again, that it is possible to recognize an artisan class.

It is not, even at present, possible to look on these two economies as occupying entirely separate fields of activity, and the tendency in the future must inevitably be in the direction of greater fusion. While in the Union or Southern Rhodesia the accepted policy would assign a separate economic existence to the bulk of natives, and confine them to a position subordinate to those who compose the European economy, the possibility of a complete fulfilment of this ideal depends on economic factors (such, for instance, as the continuance of gold production) which may themselves be subject to modification. In many other parts of Africa it is clear, from what has been said, that there is a large field of economic activity into which Europeans are not likely to enter, and even in that on which they have entered there is a wide scope for the native to develop his economic life on lines complementary to those taken by the European. Not only is this so, but the future economic prosperity of some of these countries probably depends more on the general development of native economic activity than on the results of European enterprise. But here, as elsewhere, the factors of economic evolution are not only material but psychological. The African cannot achieve his economic development without a material change in his present social custom, involving, among other things, some measure of individualization in the holding of property and of differentiation in the economic position of individuals and classes, the growth of specialized occupations, including those of the artisan and the trader, and the building up of a social sense which permits of the erection of a credit system and the normal operation of a law of contract.

XXI. CO-OPERATIVE ORGANIZATION

Further experience is required before it is possible to judge clearly of the function which co-operative organizations are likely to perform in native Africa. Save in the Union, in some parts of the West Coast, and in urban areas, there has not as yet arisen a need for the extension of the co-operative movement for the purpose of providing credit facilities. The native societies now in existence, which are principally in Tanganyika, Nigeria, and the Gold Coast, function for the most part in connexion with production and marketing. They owe their success largely to the official guidance given to them, but though they cannot be said to be fully independent, they have their value in stimulating interest in the use of joint action. The French *sociétés de prévoyance* have taken a considerable part in agricultural development; they are, however, official organizations.

It has been suggested that the creation of groups of persons united by interests not shared by the rest of the community is likely to prejudice the position of the institutions on which the system of indirect rule is based. It is very doubtful if this is a necessary consequence; but it would nevertheless be an advantage to associate the native administrations with the working of societies founded within their jurisdiction.

XXII. MINERALS AND MINES

In the Union, the Rhodesias, and the Belgian Congo development has been in the past, and is still to-day, largely dependent on the mining industry; in British West Africa mining has shared its position with the products of native agriculture, while in East Africa it is of relatively recent date. In some other areas, such as French Equatorial and West Africa, it is still of minor importance. But taking Africa as a whole, it may be said that mining has been one of the most important factors responsible for bringing European capital to the continent, and for the introduction of the modern industrial system.

It is not possible to say what capacity exists in Africa for the expansion of mining, more especially of the baser metals, which have hitherto been less exploited than the precious metals. While

the growth of industrialization due to the expansion of mining may doubtless have reactions on African life, demanding the serious attention of the administrations, nevertheless the possibility of developing the finances available for expenditure on the social services in certain of the African territories depends largely on the exploitation of their mineral resources. The share which the governments can take in this process lies mainly in making larger provision for geological survey, and in simplifying the regulations regarding prospecting, mining leases, and taxation. These matters would seem to require a closer attention than has hitherto been given to them.

XXIII. TRANSPORT

Transport has two important aspects: first, the provision of those major lines of communication which make it possible for African products to enter the world's markets, and second, the construction of the road system required for the development of interior trade. In South Africa, the Rhodesias, and the Congo, the mining interests called forth the capital necessary to construct the railways and provide services on the rivers; elsewhere communications were constructed to meet the general requirements of development policy. The cost of these major lines of communication has been estimated at £384,000,000, and though some of the railways have been self-supporting, particularly those serving the richer mining areas, there are many cases where the fixed interest has become a charge on the general revenues of the administration. Where a government has sufficient resources, it is not unreasonable to treat part of the capital cost of a railway as development expenditure, from which no return in interest is to be expected. But few of the African colonies can afford this procedure, and it is not likely that, in the near future, colonial governments will undertake any considerable railway extension, unless experience gained from the use of road transport, or the opening up of large mining undertakings, ensures a prospect of remunerative freight.

The construction of roads serving internal markets has already done much to reduce the amount of head-porterage, which was formerly a cause of much human suffering, and even to-day is the most wasteful form of transport. But there are many areas still in

need of the establishment of internal markets, with the roads necessary to serve them; this is, indeed, an essential step in the evolution of African economy.

XXIV. THE FUTURE OF AFRICAN STUDIES

We see before us now the most formative period of African history, and much that is done to-day will have a decisive effect on the future of the African peoples. The task of guiding the social and material development of Africa gives rise to problems which cannot be solved by the application of routine knowledge; they require a special knowledge, which can only be gained by an intensive study of the unusual conditions. This study must be pursued in the field of the social as well as in that of the physical sciences. But for this purpose assistance is required from the Imperial Government, and it is suggested that this should take the form of a grant to be administered either by a Committee of the Privy Council or by the Economic Advisory Council. For certain types of research the managing body might well make a fuller use of the existing imperial institutions, as an alternative to an extension of the establishments for research maintained in the colonies. It is further suggested that the difficulty which is now felt in readily obtaining information should be met by the establishment of an African Bureau covering social, economic, scientific, and administrative problems, which will constitute both a clearing-house for information and a source of assistance to all those who are pursuing research or inquiry into African questions.

TABLE XVII. *Measures used in the Survey*

1 morgen	= 2·1164 acres.
1 hectare	= 2·4711 acres.
1 kilometre	= 0·62137 mile.
1 metric ton	= 1,000 kilogrammes.
	= 2,204·6223 lb. = 0·9842 English ton.
Long ton	= 2,240 lb.
Short ton	= 2,000 lb.
1 kilogramme	= 2·2046223 lb.
1 square kilometre	= 0·3861 sq. miles.
Bale of cotton	= 400 lb.
Bag of maize	= 200 lb.

ACKNOWLEDGEMENTS

It is impossible to give adequate acknowledgement to all who have helped in various ways in the compilation and scrutiny of *An African Survey*. In the following lists mention is made of those who supplied substantial drafts for chapters or special memoranda, who read the chapters in draft or proof and supplied comments, and who gave assistance in other ways, such as the loan of material, or answers to queries.

J. C. ABRAHAM; Dr. R. F. G. ADAMS; L'AGENCE ÉCONOMIQUE DE L'AFRIQUE ÉQUATORIALE FRANÇAISE; L'AGENCE ÉCONOMIQUE DE L'AFRIQUE OCCIDENTALE FRANÇAISE; Sir Maurice AMOS; G. G. AUCHINLECK.

S. J. K. BAKER; Mr. and Mrs. W. G. BALLINGER; J. Austen BANCROFT; A. M. BECKETT; Monsieur BÉLIME; H. BENNETT (U.S.A.); Monsieur M. BESSON; Miss D. G. BRACKETT; Monsieur M. J. BRÉVIÉ; The BRITISH BROADCASTING CORPORATION; Canon BROMFIELD; Dr. E. H. BROOKES; Major G. St. J. Orde BROWNE; F. BROWNLEE; C. BULLOCK; Father A. BURBRIDGE.

Sir Donald CAMERON; Professor A. M. CARR-SAUNDERS; A. W. CARRUTHERS; Monsieur A. CHARTON; Dr. C. C. CHESTERMAN; Major A. G. CHURCH; The CHURCH MISSIONARY SOCIETY; The CHURCH OF SCOTLAND FOREIGN MISSION OFFICE; Professor F. CLARKE; Professor H. CLAY; The COLONIAL FOREST RESOURCES DEVELOPMENT DEPARTMENT; J. R. COOPER; Monsieur M. de COPPET; Professor R. COUPLAND; The Rev. H. W. COXILL; The Rev. A. S. CRIPPS; Mr. and Mrs. A. T. CULWICK; The late Sir James CURRIE.

Dr. F. DIXEY; Dr. C. M. DOKE; The Rev. J. W. C. DOUGAL; C. E. DUFF; H. J. E. DUMBRELL.

Major P. Granville EDGE; F. J. ERROLL; Dr. Ifor L. EVANS; The Rev. D. V. EVENING.

S. H. FAZAN; A. J. FINDLAY; G. H. FINDLAY; Dr. R. W. FIRTH; Dr. D. C. FISHER; Professor C. Daryll FORDE; Dr. M. FORTES; Professor S. H. FRANKEL; Major R. D. FURSE.

Monsieur L. GEISMAR; The GENERAL MEDICAL COUNCIL; P. E. L. GETHIN; C. GILLMAN; Dr. A. J. H. GOODWIN; Miss M. M. GREEN; Professor J. F. W. GROSSKOPF.

E. F. S. HAIG; Dr. A. L. HALL; Sir Daniel HALL; Brig.-Gen. F. D. HAMMOND; D. G. HARRIS; Sir John HARRIS; E. HARRISON; Mrs. Ellen P. HELLMAN; F. HEMMING; Professor M. J. HERSKOVITS; Monsieur HEYSE; Professor and Mrs. R. F. A. HOERNLÉ; R. S. HUDSON; Sir W. E. HUNT; E. R. J. HUSSEY; Mrs. Elspeth HUXLEY; Dr. J. S. HUXLEY.

The INTERNATIONAL LABOUR OFFICE; The INTERNATIONAL MISSIONARY COUNCIL; A. A. M. ISHERWOOD.

G. V. JACKS; J. D. RHEINALLT JONES; W. J. A. JONES; Professor E. DE JONGHE; H. JOWITT; Dr. N. R. JUNNER; Dr. H. A. JUNOD.

F. E. KANTHACK; Dr. W. H. KAUNTZE; J. L. KEITH; Sir Robert KOTZE; Mr. and Mrs. J. D. KRIGE; Dr. R. R. KUCZYNSKI.

Professor H. LABOURET; Major A. Travers LACEY; C. G. LATHAM; Dr. L. S. B. LEAKEY; Mrs. S. LEITH ROSS; Monsieur LEONARD; Professor G. P. LESTRADE; Dr. C. LEUBUSCHER; J. LEWIN; A. D. LEWIS; Dr. K. LIEPMANN; A. LLOYD JAMES; The LONDON SCHOOL OF HYGIENE and TROPICAL MEDICINE; Monsieur O. LOUWERS; Sir H. Verney LOVETT; F. A. W. LUCAS; Lord LUGARD.

H. B. A. McCARTER; H. W. McCOWAN; R. M. MCGREGOR; A. R. MACKENZIE; Dr. M. D. MACKENZIE; H. C. D. C. MACKENZIE-KENNEDY; J. R. MACKIE; Dr. G. McLEAN; Sir William H. McLEAN; Professor W. M. MACMILLAN; Monsieur J. MAGOTTE; Dr. L. P. MAIR; D. W. MALCOLM; Professor B. MALINOWSKI; Brig.-Gen. Sir H. O. MANCE; Dr. J. S. MARAIS; L. MARQUARD; John MARTIN; A. G. MARWICK; H. B. MAUFE; J. C. MAY; J. A. MAYBIN; Dr. C. K. MEEK; The Hon. Mrs. J. B. MILLER; S. MILLIGAN; Sir P. MITCHELL; H. R. MONTGOMERY; Dr. W. B. MUMFORD; Sir Arnold MUSTO; Professor J. L. MYRES.

Dr. S. F. NADEL; Miss M. NEWTON; R. P. NICHOLSON; R. C. NORTHCOTE.

Professor A. OGILVIE; J. N. OLIPHANT; Monsieur Libert OURY.

Dr. A. R. PATERSON; Count J. de PENHA GARCIA; Miss M. F. PERHAM; Dr. Hans PIROW; Professor Arnold PLANT; E. H. Lane POOLE; K. H. PRIOR.

Professor A. R. RADCLIFFE-BROWN; H. R. RAIKES; Lt.-Col. C. F. REY; Dr. A. I. RICHARDS; E. C. RICHARDS; S. RIVERS-SMITH; Dr. H. M. ROBERTSON; E. A. G. ROBINSON; Howard ROGERS; W. MacGregor ROSS; The ROYAL ANTHROPOLOGICAL SOCIETY; The ROYAL COLLEGE OF SURGEONS; Sir J. RUSSELL; Major F. H. RUXTON; Monsieur P. RYCKMANS.

Dr. M. SALVADORI; H. C. SAMPSON; Dr. K. S. SANDFORD; The Earl of SCARBROUGH; Professor I. SCHAPERA; Monsieur SCHMITZ; The SCHOOL OF ORIENTAL STUDIES; Dr. H. H. SCOTT; H. S. SCOTT; Professor C. G. SELIGMAN; Dr. T. Drummond SHIELS; H. L. SIKES; Dr. H. J. SIMONS; W. C. SIMMONS; D. L. SMIT; Dr. E. W. SMITH; The SOCIETY FOR THE PROPAGATION OF THE FAITH; Professor E. P. STEBBING; C. F. STRICKLAND.

E. S. B. TAGART; Sir E. O. TEALE; H. B. THOMAS; Dr. A. L. du TOIT; Professor R. S. TROUP.

The UNITED SOCIETY FOR CHRISTIAN LITERATURE.

Major Hanns VISCHER.

Sir A. de V. WADE; Professor Eric WALKER; Dr. I. C. WARD; Sir Thomas WARD; Dr. N. J. van WARMELO; E. J. WAYLAND; Professor D. WESTERMANN; Dr. R. O. WHYTE; Dr. C. WILCOCKS; Dr. R. C. WILSON; Miss Margaret WRONG; The Hon. H. A. WYNDHAM.

J. Mould YOUNG; The Rev. T. Cullen YOUNG; The Rev. W. P. YOUNG.

The Index has been compiled by Miss S. F. STALLMAN, M.A., and Dr. M. LAMBERT, B.A., PH.D.

INDEX

NOTE: As far as possible the Index has been arranged so that details of subjects appear under territorial headings. Provinces of territories are placed at the end of each territorial heading. To facilitate reference the more important entries have been repeated at head of columns.

Abercrombie, Dr. J., Edinburgh Medical Mission founded by, 1116.
 Aberdeen Research Station, *see under* Northern Rhodesia.
 Aborigines Rights Protection Society, Gold Coast forest legislation opposed, 1002.
 Abyssinia: diseases, leprosy, prevalence, 1140; refugees in Kenya, financial assistance, 1446.
 Abyssinian Plateau, elevation and relief of, 3.
 Achimota College, *see under* Gold Coast, education (native).
 Achour, tax in Fr. W. Africa, 589.
 Acoli language, 77, 88.
 Adams, R. F. G., Ibo grammar, 92.
 Administration: inter-departmental co-operation, 1612; systems in African dependencies, summary, 1641.
 Afoa, *see under* Belgian Congo, industrial concerns.
 AFRICA: eastern highland area, 3; government—considerations affecting form of, 246-7;—problems of, 254-5;—systems, general conclusions, 246-60, 1641; languages, *see under* Language; physical features of, 1-4;—summary of, 1666; peoples of, *see under* Peoples; population—capacity, 124-5;—statistics, 108, 109 (*see also under* Population); Rift valley system, 3; special problems, 1611-12.
 'Africa' Orthography and Alphabet, *see under* Language.
 Africa, periodical publication, 1633.
 African Bureau: financial aspects, 1635; organization and functions, 1634-5; recommended, 1662.
 African culture, importance of anthropological study, 1637.
 African Explosives and Industries Company, agricultural research by, 946.
 African Lakes Corporation: Nyasaland concession acquired, 705; anti-slavery campaign assisted, 1538; operation in Nyasaland, 1385.

African Life and Languages, School of, *see under* Universities, University of Capetown.

AFRICANS, EMPLOYMENT: agricultural demonstrators, 965-8; Agricultural Department officials, 964; civil servants, 233, 234, 235-7, 239, 241, 255-60, 1642-3; dentists, 1169; doctors—'auxiliary', 1172-3, 1177;—limitations on private practice, 1183; engine drivers, 692, 1581, 1586; forest guards, 995, 996, 1003, 1004, 1007; forest rangers, 996, 1000, 1002, 1004; foresters, 995, 998, 1002-4, 1020-1;—recommended, 1652; health services subordinate staff, 1115, 1156-7, 1159, 1162-3, 1166-8, 1170-4, 1176-7, 1179, 1181; industrial work, capabilities, 1427-8; medical assistants, 1168-9, 1275;—conclusions, 1654; medical officers, 1168, 1169-70; microscopists, 1162; postal servants, 692; skilled labour, training in Belgian Congo, 1274; survey work, 9, 10; telegraphic services, 692; training in agriculture, *see under* Agriculture, native education; Education, native; tsetse reduction measures, 1132; wireless staff, 1299.

Afrikaans language, use of in education, Union of S. Africa, 1212.

Agni people, land tenure customs described, 840.

Agriculture.

Advisory Committee on Agriculture and Animal Health, 1627; capitalist enterprise, uses and benefits, 983; concessions system, 981; conferences, *see under* Agriculture, research.

CROPS:

bananas: cultivation requirements, 901; European production, 919;—Br. Cameroons, 928;—Fr. Cameroons, 928;—Fr. W. Africa, 928; export trade, 901-2; liquor brewed from, 901; native cultivation, 901-2; origin of, 883.

Agriculture—Crops (*cont.*)

- beans: European cultivation, 919;
native food, 888.
- beeswax, native production, 891.
- cacao (*Theobroma cacao*) and cocoa:
cultivation requirements, 906-7;
deforestation prejudicial to, 1103;
European cultivation, 919; export
destination, 1332; introduction to
Africa, 907; native cultivation, 907-
9; Nigeria, 951; origin, 883-4; pro-
duction, 1326;—British dependen-
cies, 1332; varieties grown, 908.
- cash, ecological survey, N. Rhodesia,
954; erosion increased by, 1078;
taxation, 596.
- cashew nuts, native production, 917.
- cassava (manioc): cultivation, 896;
disease, 896; native cultivation,
895-6; native food, 888; origin, 883;
toxic qualities, 896; varieties, 896.
- cinchona, European production, 920.
- cloves, origin, 884.
- coco-nuts and copra: native produc-
tion, 914; origin, 884; palm cultiva-
tion for, 914.
- coco-yams (*Colocasia antiquorum*): culti-
vation requirements, 897; native cul-
tivation, 897; toxic attributes, 897.
- coffee: cultivation requirements, 909;
European cultivation, 919, 920, 923-
4; native attitude to, 909; native
cultivation, 909-11, 923-4; origin,
884; pests, control work, 910, 970;
production, 1326; Tanganyika ex-
ports to Kenya, 1330; varieties
grown, 909.
- cotton: Cotton Research and Indus-
trial Board, work, 903; commercial
varieties grown, 903; cotton-seed
oil, experiments for utilization, 905;
cultivation requirements, 902; Em-
pire Cotton Growing Corporation,
research stations, 1622; erosion and
cultivation, 1099; European pro-
duction, 922-3; exports, destination,
1332; Gezira scheme and cultivation
of, 1054-5; ginned production, 1327;
indigenous and imported varieties,
902; native production, 902-6, 922-
3; origin, 884; pests and control,
903, 970; seed production, 1327;
varieties grown, 905, 906.
- cover, *Mucuna*, 962.
- cucumbers, native food, 888.

Agriculture—Crops (*cont.*)

- derris, research on cultivation, Amani
Station, 957.
- diseases, 970-1; *see also under* Agricul-
ture, research.
- eleusine, native cultivation, 893-4.
- essential oils: European cultivation,
919; grants from Colonial Develop-
ment Fund, 919.
- fruit: citrus, 917-18; European pro-
duction, 918, 920, 927-8;—in Belgian
Congo, 928;—Union of S. Africa,
918; native cultivation, 891.
- gero, *see under* Agriculture, crops
(pennisetum).
- ginger, native cultivation, 890.
- groundnuts, cultivation and uses, 897;
European cultivation, 919; exports,
origins, 1332; native cultivation,
897-9; native food, 888; origin, 883;
production, 1326.
- Guinea corn, *see under* Agriculture,
crops (sorghum).
- jute, native production, 890.
- kaffir corn, *see under* Agriculture, crops
(sorghum.)
- kola nuts, 1014; European production,
919; native, 890.
- maize: cultural methods, S. Rhodesia,
921; European production—N. Rho-
desia, 921;—S. Rhodesia, 919, 920;
—Tanganyika, 921;—Union of S.
Africa, 918, 920; native cultivation,
891-3; native food, 888; origin, 883;
soil requirements, 891.
- melons, native cultivation, 891.
- millet, bulrush, *see under* Agriculture,
crops (pennisetum).
- millet, finger, *see under* Agriculture,
crops (eleusine).
- millet, great, *see under* Agriculture,
crops (sorghum).
- millet, lesser, *see under* Agriculture,
crops (pennisetum).
- millet, native food, 888.
- Mundulea, research on cultivation,
Amani Station, 957.
- oil-seeds, 1014.
- oil palms, European cultivation, 919.
- palm products: improvement schemes,
912; industry, development, 911;
native production, 911-14; palm ker-
nels—exports destination, 1332;—uses,
911; palm oil—exports, origin, 1332;
—extraction, 911;—production, 1326.

Agriculture—Crops (*cont.*)

- paw-paw, native cultivation, 891.
- peas, native food, 888.
- pennisetum: awned type, Kenya, 949; cultivation, 894; native cultivation, 893-4.
- pennisetum (bulrush millet), origin, 883.
- pepper, native food relish, 888.
- pests, *see under* Agriculture, pests.
- piassava: cultivation, 890; exports, 889-90; native cultivation, 889-90.
- plantains: cultivation requirements, 901; liquor brewed from, 901; native cultivation, 901-2; native food, 888.
- potatoes: cultivation, 889; European cultivation, 919.
- potatoes, sweet: nutritive value, 889; origin, 883; propagation and cultivation, 889.
- pulses: native cultivation, 900-1; phaseolus bean in W. Africa, 900; varieties, 900.
- pumpkins, native food, 888.
- pyrethrum: European cultivation, 919; exports from Kenya, 919; investigation grants from Colonial Development Fund, 919; malaria control, 1126.
- research, *see under* Agriculture, research.
- rice: European cultivation, 919; indigenous species, 894; native cultivation, 889, 894-5; origin, 883; terracing for, 1064.
- rotation: experimental work, 962; scientific application advocated, 960.
- rubber: 1014, 1016; Congo Free State monopoly, 791; European production, 919; native cultivation, 890; Nigerian lease, 770; production, 1326-7; wild rubber, 890.
- sesame (*simsim*): cultivation requirements and methods, 899; native cultivation, 899-900; production of, 1326.
- shea nuts: 1014; native production, 890.
- simsim*, *see under* Agriculture, crops (*sesame*).
- sisal: European production, 919, 926; exports, destination, 1332; Indian production, 926; production, 1326; —in British dependencies, 926, 1332.

Agriculture—Crops (*cont.*)

- sorghum, native cultivation, 893-4; origin, 883; soil deterioration through, 1088; value of plant, 894.
- soya bean, experimental cultivation, 901.
- spinach (wild), native food, 888.
- sugar: European production, 918, 919, 928-9; Indian production, Kenya, 929; origin, 883; sugar cane, native food, 888.
- tea: European production, 919, 920, 924; international restriction scheme, 1386.
- tobacco: cultivation requirements, 915; European cultivation, 915-16, 918, 919, 925-6; native coarse, 915; native cultivation, 915-17; in Nyasaland, 925; pests and disease control, 970; production, 1326; varieties grown, 917.
- tomatoes, native food, 888.
- wattle: cultivation for erosion-control, 1097; native cultivation, 890; tan stuffs produced from, 1014.
- wheat: European production, 918-19, 921-2; native cultivation, 889; origin, 883.
- yams (*Dioscorea*): cultivation requirements, 897; native cultivation, 896-7; native food, 888.
- Cultivation, erosion caused by, 1057, 1061.
- CULTIVATION METHODS: composting, erosion reduced, 1066; cover crops, erosion control, 1065; manures, green, erosion reduced, 1065-6; mixed farming, erosion reduced, 1065-6; plough, influence on erosion, 1078, 1085, 1100; rotation of crops, erosion control, 1065-6; strip cropping, erosion control, 1065; terracing, value, 1064-5.
- Dairying, *see under* Agriculture, livestock.
- EUROPEAN: Belgian Congo, 919-20; co-operation, Union of S. Africa, 1468; co-operative organization, 1467-71; Fr. Cameroons, 919; Fr. Equatorial Africa, 919; Fr. W. Africa, 919; future of, conclusions, 1658; Gold Coast, 919; Kenya, 919; main characteristics, 918; maintenance, question reviewed, 1394-6; Nigeria, 919; N. Rhodesia, 919; Nyasaland, 919; prospects and future, 1394-6;

Agriculture—European (*cont.*)

Sierra Leone, 919; S.W. Africa, 918; S. Rhodesia, 918; suitability to Africa, question examined, 1395-6; Swaziland, 918; Tanganyika, 919; Uganda, 919; Union of S. Africa, 918.

LABOUR: migration, 699; native conditions in Union, 673; squatter, 724-5; supply, 695-6; *see also under* Labour.

LIVESTOCK:

areas unsuitable through tsetse infestation, 1129.

breeding: Belgian Congo, 953; castration question, 975-6; clarification of policy needed, 976; difficulties in tropical areas, 976; experimental work for improvement, 974-7; Fr. Cameroons, 953; imported cattle a question of suitability, 975; native attitude, 882-3; Nigeria, 950; Portuguese colonies, 953; research—N. Rhodesia, 1466;—S. Rhodesia, 947; Uganda, 950.

cattle: Africa, suitable for, 930; Afrikaner—breeding work, 975;—description, 931; breeding importation, disease susceptibility, 932; breeds imported for crossing, 931; death of, failure to report—in Kenya, 660;—in Tanganyika, 660; Hamitic Longhorn, origin, 930; Malinke, disease resistant character, 976; meat industry, 937-9; native stock rearing, methods, 932; N'Dama—disease-resistant character, 977;—origin and distribution, 930; origin of African, 883; overstocking in Kenya reserves, 811-13; pastoral tribes, distribution, 929; quarantine regulations—effect on industry, 936-7;—and overstocking, 937; shorthorn (*Brachyeros*), origin, 930; slaughter, native attitude, 937-8; slaughter cattle, 937-9; social aspect of and influence on labour, 694; squatter-owned in Kenya, 755; tsetse fly and distribution of, 929; W. African shorthorn—evolution, 930-1;—trypanosomiasis resistant, 929; zebu—description, 931;—disease resistant, 931.

chicken: native industry, 929-30; place in native life, 929-30.

culling: measures for, 973; native attitude, 882.

Agriculture—Livestock (*cont.*)

dairying, 941-3; ghee, native production, 941-3.

dipping: as disease preventive, 974; provision for, 974.

disease: anthrax—area of infection, 935-6;—and control measures, 936; contagious pleuro-pneumonia—area of infection, 935;—control measures, 935;—and vaccination, 935; control and erosion danger, 1079; East Coast fever—area of infection, 934;—preventive measures, 935;—and research, Union of S. Africa, 946;—Uganda, 949; foot and mouth—area of, 935;—research, S. Rhodesia, 947; imported cattle susceptible, 933; prevalence, 932; rinderpest, 931;—control, 1079;—epidemic (1896), 933-4;—its effect on S. Rhodesia, 1379;—and immunization, 934;—vaccination, experiments, Fr. Cameroons, 934;—vaccination methods and efficacy, 934; trypanosomiasis, 931;—area of infestation, 932-3;—preventive measures, 933;—treatment, 933; tuberculosis, 1140;—area affected, 936.

fencing: as disease preventive, 974; and paddocking, 971-2; progress made, 974.

fodder crops cultivation, 972-3.

goats: Angora introduced, 932; decrease advocated, 1111-12; destructive feeding, 1097; disease resistance of, 932; overstocking, 1095-6; place in native life, 929.

grazing, rotational, as conservation method, 971-2.

hides and skins, production and trade, 939-41.

irrigation for stock raising in Union, 1032-3.

management: destocking as anti-erosion measure, 1068-71; grazing areas—burning, value, 1068;—controlled burning as anti-erosion measure, 1067-8;—drought resistant plants as anti-erosion method, 1068;—improvement of grasses as anti-erosion measure, 1068;—kraaling and erosion, 1067;—overgrazing and erosion, 1060;—rotational grazing as erosion control, 1066-7; training provision in, 977-8.

Agriculture—Livestock (*cont.*)

native attitude towards, 882-3.
neglect, punishable in N. Rhodesia, 660.

nutrition, pasture deficiencies, 972.

overstocking: causes, 971; control needed, 1109, 1111-12; Gold Coast, 1103; by natives, 882; effect on productivity of land, 1063; question of, 1079-80, 1084, 1085, 1086, 1094, 1095-6, 1097, 1099, 1100-1; well sinking as relief, disadvantages, 1062.

pigs, 939.

sheep: breeds imported for crossing, 931-2; native, 929; native types, 931; wool, production, 941, 1326.

tax: advantages and disadvantages, 597; assessment Fr. W. Africa, 590; in Fr. Cameroons, 592; in French dependencies, 589; in Nigeria, 589; *jangali*—in Br. Cameroons, 583;—in Nigeria, 577-8.

MANURE:

compost: anti-erosion use, 1094; manufacture and experiments, 963; Nairobi factory, 963.

composting: methods suggested, 962-3; suitability to native methods, 960.

green: erosion control uses, 1094; extended use, 960; *Mucuna*, its uses and disadvantages, 962; research on—in Nigeria, 950;—in S. Rhodesia, 921.

mulching, coffee cultivation, 910.

systems required, 880.

Marketable crops, *see under* Agriculture, crops (cash).

NATIVE:

agricultural shows and improvement in, 968.

Bantu practices, 22-3.

capital and credit, problem of supply, 1428-9.

capitalist enterprise and effect on, 983. character of, 880-1.

chief industry, 979.

chitemene: harmful effects, 1088; Rhodesian form of shifting cultivation, 879; system, 1088.

collective farming and improvement of, 966.

communal labour for chiefs, 881.

competitions and improvement in, 968.

COMPULSORY PRODUCTION: Belgian dependencies, 633-4; British depen-

Agriculture—Native (*cont.*)

dencies, 631-2; comparison with Dutch East Indian system, 715-16; French dependencies, 632-3; marketing, 634-5; Portuguese colonies, 635; system discussed, 634-5.

conservatism in methods, discussed, 886-7.

co-operation: considerations governing, 1405; scope for, 1404; uses, 982-3.

co-operative societies, possibilities, 1466.

credit: present system, 1429; restricted by transfer difficulties, 854.

CROPS: 888-917; cash, 888;—effect on subsistence crops, 961; maize, 892; finger millet, proposed reduction in Nyasaland, 1090; palm groves, native tenure rights studied in Belgian Congo, 841; subsidiary, 888; subsistence, 888-91;—improvement needed, 961; varieties grown, 883-4.

EDUCATION: anti-erosion, Tanganyika, 1092; demonstrators trained—Fr. W. Africa, 1269;—Union of S. Africa, 1222; Fort Hare, Union of S. Africa, 1818; Fr. W. Africa, 1266; livestock management, as anti-erosion measure, 1669-70; need for facilities, 961; training facilities, 964-8.

'educative' cultivation: 629; in Belgian Congo, 893, 906, 911.

European occupation and effect on, 884-5.

European science and development of, 887.

food production, decrease, 886, 978-9.

garden cultivation, crops grown, 888.

garden system, changes in, 884.

implements: 881; plough, doubtful benefit, 885.

IMPROVEMENT: 1395; *Cadulac* organization, 953; capital and credit facilities, problem of supply, 1428-9; for economic development, 1416-17; government collaboration, 1405; and land tenure rights, 837-8; need, 1404; summary and conclusions, 1650-1.

indebtedness, 872-3.

labour demand, its influence on, 885, 979-80.

labour migration and effect on, 704.

land restriction and effect on, 885.

Agriculture—Native (*cont.*)

land tenure systems, impediment to credit facilities, 1429–31.

LIVESTOCK: dairying, ghee dairies, 1421; European occupation and increase in, 886; goats for bride-price payment, 1079; hides and skins, curing depots, 1421; increase, reasons, 1079; increased sales as anti-erosion measure, 1069–70; manure, native neglect, 883; overstocking, 886; products, attempts to increase consumption, 1069–70; social and religious conception, 882–3; un-economic, attempts to curtail, 1069–70; veld burning causes erosion, 1067. marketing: inquiry into needed, 1614; produce regulation and grading, 1421–2.

métayage system, 884.

mixed farming: description of system, 963; development in Nigeria, 963; development recommended, 961; experiments, Belgian Congo, 953; extension possibilities, 963–4; manure utilization in Nigeria, 883.

'mounding': anti-erosion effect of, 1103; system, 880.

non-native enterprise, its value for, 983.

overstocking problem, and Bantu, 22.

peasant production, 884; British policy, 981–2; crops suitable, 980–1; merits and disadvantages, 980–3.

plantation system, development in Gold Coast, 884.

population dependent on, 1416.

production: basis for calculation, 959; compulsory stimulation, 630–5; for sale and export, effect on, 884.

publications, journal in Transkei, 966. rotational bush fallow system, 880.

SHIFTING CULTIVATION, 879–80; *chitemene* system, 879–80, 1088; deforestation, 985; demarcation of forest reserves, 1021–2; improvements suggested, 960; increase and erosion, 1077–9; land restriction and, 885; practised by Bantu, 22–3; savannah forest as basis for, 986; security of tenure under, 867–70; soil deterioration under, 885; village conditions and, 881–2.

small holdings: in Tanganyika, 969; in Uganda, 969.

Agriculture—Native (*cont.*)

social economy of, 880–1.

soil productivity affected by, 880.

study of systems necessary, 960.

subsistence crop economy, 879.

systems of: and land tenure, 869–70; reorganization for erosion control, 1109.

taxation and influence on, 884–5.

traditional methods, rotational grazing, 1067.

women: food production, 888–9; place in, 881.

Non-native: erosion, tobacco farms, Nyasaland, 1089.

Pasture lands: burning system, 1080; scientific management needed, 1109.

Peasant and plantation production compared, 1403–4, 1651–2.

PESTS:

banana, research in Uganda, 950.

cacao research: Gold Coast, 951; Nigeria, 950.

cassava research: Amani Station, 956; Nigeria, 950.

citrus research, Gold Coast, 951.

coco-nut palm, 914.

coffee: control in Uganda, 910; in Kenya, 923; research—Amani Station, 956;—Kenya, 949;—Tanganyika, 948.

cotton: control in Nyasaland, 903; research—Nigeria, 950;—S. Rhodesia, 922;—Uganda, 949.

crops, control measures, 970–1.

locusts, *see under* Locusts.

striga control in S. Rhodesia, 921.

ticks, destroyed by veld burning, 1068.

tobacco research, Nigeria, 950.

weeds, noxious, eradication efforts, 970.

wheat, in Kenya, 918, 921–2.

yam research, Nigeria, 950.

Plantation system: 980–3; crops developed under, 981; versus peasant cultivation, summary and conclusions, 1651–2.

Populations dependent on, comparative figures, 1416.

PUBLICATIONS: Belgian Congo, 958; B. E. Africa, 958; East African Agricultural Research Station, Amani, 958; French dependencies, 958; Ruanda-Urundi, Belgian mandated territory, 958; Union of S. Africa, 958.

Agriculture (*cont.*)

RESEARCH, 943-60.

- Agricultural Research Council, 1619.
- Amani Station, 1622; *see also under* British East Africa.
- animal husbandry and health, interrelation, study needed, summary and conclusions, 1666.
- bananas: Fr. W. Africa, 952; Uganda, 950.
- barley, Union of S. Africa, 946.
- Belgian Congo, 953.
- British dependencies, 1621-2.
- cacao: Belgian Congo, 953; Fr. Cameroons, 952; Fr. W. Africa, 952.
- cassava, toxic principle, 1619.
- cinchona, Amani Station, 956.
- coffee: Amani Station, 956; Belgian Congo, 953; Fr. Cameroons, 952; Fr. Equatorial Africa, 952; N. Rhodesia, 948; Tanganyika, 948; Uganda, 950.
- conferences: Amani, 1626 (*see also under* British East Africa, Amani Agricultural Research Station); chemists, Br. E. Africa, 956, 957; Imperial Agricultural Research Conference, 1616-17, 1625; soil science, 1626; veterinary, 1626.
- co-ordination: by conferences, 1625-6; of policies in British dependencies, 954-8.
- cotton: Belgian Congo, 953; Empire Cotton Growing Corporation, 945;—and its stations, 1622; Fr. Equatorial Africa, 952; Kenya, 949; Niénébalé Station, 1049; Nigeria, 950; Uganda, 949.
- crop plants, Great Britain, 943-4.
- dairy, S. Rhodesia, 947.
- ecological survey, 954.
- Empire Marketing Board assistance, 1617.
- entomology: Empire Cotton Growing Corporation, 945; Gold Coast, 951; Great Britain, 944; Kenya, 949; Nigeria, 950; Tanganyika, 948; Uganda, 950.
- essential oils, Amani Station, 956.
- food crops, native, Belgian Congo, 953.
- Fr. Cameroons, 952-3.
- Fr. Equatorial Africa, 952-3.
- Fr. W. Africa, 952.
- fruit: Great Britain, 944; and Union of S. Africa, 948.

Agriculture—Research (*cont.*)

- fruit preservation, 1619.
- Gold Coast, 951.
- groundnuts, Fr. W. Africa, 952.
- Imperial Agricultural Bureaux, 1607-18.
- industrial concerns in Union of S. Africa, 946-7.
- Indac, Belgian Congo, 953.
- institutions: Belgium, 953; France, 952; Great Britain, 943-5, 1608.
- International Institute, Rome, 1606.
- Kenya, 949, 1618.
- LIVESTOCK: 944, 1622; breeding, N. and S. Rhodesia, 947-8; diseases—
 - East Coast fever, S. Rhodesia, 947;
 - heart water, S. Rhodesia, 947;
 - horse sickness, S. Rhodesia, 947;
 - Fr. W. Africa, 952;—rinderpest, Kenya, 949;—trypanosomiasis, S. Rhodesia, 947;—tuberculosis, Uganda, 949; Empire Marketing Board assistance, 1617; genetics, Great Britain, 994; inter-departmental co-operation, 1612; subjects for inquiry, 1613.
- 'long term': at Amani Agricultural Research Station, 948, 956-7; and French dependencies, 952.
- Madagascar butter beans, Kenya, 949.
- maize, Union of S. Africa, 946.
- marketing of native produce, inquiry needed, 1614.
- mulata surveys, Uganda, 954.
- mycology, Great Britain, 944, 1618.
- Nigeria, 950-1.
- N. Rhodesia, 947-8, 1088-9.
- Nyasaland, 948.
- oats, Union of S. Africa, 946.
- oil palms: Belgian Congo, 953; Sierra Leone, 951.
- parasitology, Great Britain, 944.
- pasture: 972-3, 1622-3; Great Britain, 944; Kenya, 1618; N. Rhodesia, 947; Union of S. Africa, 945-6.
- pests, locust control, 1616; *see also* Locusts.
- physiological ecology, Amani Station, 956.
- plant breeding, Kenya, 949.
- plant genetics: Amani Station, 956; Great Britain, 944.
- policy: Br. E. Africa, Amani Station, functions, 955-7; co-ordination, French dependencies, 958.

Agriculture—Research (*cont.*)

production costs, Union of S. Africa, 946.

rice: Fr. W. Africa, 952; Sierra Leone, 951.

rubber, Belgian Congo, 953.

Sierra Leone, 951.

sisal: Amani Station, 956; Kenya, 926, 948; Lambeg, Ireland, 948; Tanganyika, 926, 948.

soil map of E. Africa constructed at Amani, 956.

soil science, 953, 1613, 1626.

soils: Belgian Congo, 953; Benin sands, Nigeria, 950; Gold Coast, 951; Great Britain, 944; N. Rhodesia, ecological survey, 954; Owerri, Nigeria, 950; Uganda, *mutala* surveys, 954; Union of S. Africa, 946.

S. Rhodesia, 947.

stock disease, in Union of S. Africa, 946.

sugar, Union of S. Africa, 946-7.

Tanganyika, 948.

tea, Nyasaland, 948.

tobacco: N. Rhodesia, 948; S. Rhodesia, 947; Union of S. Africa, 946.

trials: coffee, Nigeria, 951; cowpeas, Nigeria, 951; fruit, citrus, Nigeria, 951; oil palm, Nigeria, 951.

types of work in Africa, 954-5.

Uganda, 949.

Union of S. Africa, 945-7, 1622.

veterinary: director recommended, Br. E. Africa, 1627; Fr. W. Africa, 952; Gold Coast, 951; N. Rhodesia, 947-8; Portuguese colonies, 953; S. Rhodesia, 947; Tanganyika, 948; Uganda, 949; Union of S. Africa, 945-6.

viticulture, Union of S. Africa, 946.

wheat: Kenya, 949; Union of S. Africa, 946.

Saleable crops, *see under* Agriculture, crops (cash).

Seed, improvement in quality needed, 961.

Sesame oil, production, 899.

Soil: conservation—co-ordination, 1611; —methods, 1109; cultivable, in S. Africa, 1027; deterioration problem, 1107-8; fertility, forests, and maintenance of, 984; surveys, 880.

Statistics of African, value of, 958-60.

Transport and communications, importance and influence, 1608-10.

Agrifor, *see under* Belgian Congo, industrial concerns.

Akan peoples, political organization, extreme centralization, 27.

Alexander, C. W., land tenure, native customs in S. Nigeria described, 839.

Algiers: cinema, film distribution through Post Office, 1303; educational system, French children attend African schools, 1262.

Amahole people, gold digging, 1485.

Amani, *see under* British East Africa, Amani Agricultural Research Station.

Amani Memoirs, publication of East African Agricultural Research Station, Amani, 958.

Ambo language group, 83.

Amery, Rt. Hon. L. S.: Colonial Films Committee appointed, 1300-1; speech on 'United East Africa', 181.

Andrade, Prof. M. J., linguistic scholar at Chicago University, 101.

Anglo-Egyptian Sudan.

anthropological studies financed by government, 54; capital investment, 1318; capital, public listed, 1319.

exports: gum arabic, 1015; percentage to Great Britain, 1330.

Gezira canal, statistics of controlled cultivation, value of, 959.

Gezira scheme: 1050; cost, 1053; tenancy conditions, 1054.

grants-in-aid, 1320.

imports: British African proportion, 1335; government, 1339-40; Japanese percentage, 1337; value per head of population, 1334.

languages in, 77.

meteorological service, 15.

trade balance, 1349-50.

transport: air subsidy, Imperial Airways, 1601; trans-African, Imperial Airways, Khartoum-Lagos service, 1597.

water supply, Gezira scheme, 1050.

yellow fever: endemic area, 1128; research, 1127.

Angola, *see under* Portuguese colonies.

Anigstein, Dr. L., medical survey of Liberia, 1153.

Animal husbandry, *see under* Agriculture, livestock.

Annales de médecine et de pharmacie coloniale, official French publication, 1175.

Annales maritimes et coloniales, population estimates in, 122.

ANTHROPOLOGY: bibliography of African, 1659-64; British policy towards, summary and conclusions, 1637; and demography, 58-9; inquiries, official and private collaboration, 57-8; inquiries, need for co-ordination, 56-7; institutions, research and training, 51-6; and malnutrition, 58; Rhodes-Livingstone Memorial Institute centre for, 1621; and soil erosion, 59; studies by government anthropologists, 1614; University of Pretoria lectures, 1211.

Anthropology in Action, by Gordon Brown and Bruce Hutt, 48.

ANTHROPOLOGY, SOCIAL: administrative officers as inquirers, 46-8; African reactions to European culture, importance, 43; aims and methods of, 42-3; bibliography, 59-67; culture contact effect, inquiry, 1612; definition of, 42-3; erosion control by destocking, inquiry needed, 1069-71; government officers' note-books, importance and value, 49-51, 1615; interest in Africa, increasing, 43-4; methods of inquiry, 44-5; studied, Witwatersrand University, 1211; use of inquiries, by governments, 45; value in framing policy, summary and conclusions, 1637.

'Anthropos' alphabet, 78.

Anuak language, 77.

Apapa case, native lands in Nigeria (Colony) determined, 769.

Arabic language: connexion with Hausa, 93; influence of, 78.

Arabs: classification of, 117; crops introduced to Africa, 883; gold seeking in Africa, 1484-5; immigration into Africa, historical, 317; judicial system applicable to, 317; Kenya, 317; land tenure, native customary, influenced by, 850; slave trading, 317, 1385; Tanganyika, 317.

Argus Company, publisher of *The Bantu Mirror*, 85.

Armitage-Smith, Sir S., Tanganyika railway development, 1607.

Armstrong, Miss L. E., linguistic scholar, 72.

Aro Cuku language, 92.

Art, native, destructive influence of European contact, 1290.

Asantehene, Ashanti ruler, 473; *see also* under Gold Coast, Ashanti.

Ashanti peoples: land laws of, 834; political organization, 27; *see also* under Gold Coast.

Asia, co-operative societies, success, 1466.

ASIATICS: classification of, 117; employment—as nurses, 1166;—subordinate civil servants, 233;—surgeons, 1166;—surgeons, assistant and sub-assistant, 1163, 1183; population in Union of S. Africa, 1362-3; tuberculosis amongst, 1140; *see also* Indians.

Assam, labour recruitment for plantations, 65.

Association Phonétique Internationale, alphabet introduced, 79.

Aubréville, A., Ivory Coast trees, publications on, 1012.

Australia: erosion in, 1071; erosion control, 1076-7; erosion, effect on reservoirs, 1060; Murray river watershed, protection, 1076; pasture burning, experience, 1076-7; taxation, transport, road competing with rail, 1610.

Austria: Berlin Act signatory, 1341; language institutions, 70.

Aviation, *see* under Transport, and territories.

B

Baghirmi people, description of, 28.

Bahr-el-Ghazal, course of, 3.

Bahr-el-Jebel, air survey of, 10.

Bailey, Sir Abe, grant towards civil aviation, 1601.

Bailly, Professor of *Linguistique Générale* at Geneva University, 102.

Baines mining concession in S. Rhodesia, 732.

Baker, E. C., land tenures, native customs in Ukerewe Island, study, 898.

Baker, Sir S., Gallini cotton introduced in Uganda by, 904.

Baker, S. J. K., population map by, 115.

Bakopi, Buganda cultivators, 763.

Bakweri language, 94.

Bakxatla people, labour migration of, 700.

Bali language, 74, 94.

Bambara language, 76, 95.

Bangi language, 95.

Bantu.

Academy recommended, 84.

administration problem in S. Africa, 346.

Bantu (cont.)

African people, 18.
 agricultural practices, 22-3.
 agriculture: cattle, religious significance of, 22, 882; overstocking problem, 22; shifting cultivation, 22-3.
 area inhabited by, 20-1, 22.
 authors' conference, 84.
 Bantu Educational Kinema Experiment, 1302-3.
 'Bantu-line' as boundary, 20-1.
 Central Literature Board, 84.
 chieftainship, functions, 25.
 commerce, small aptitude for, 1424.
 culture, 21.
 description of, 22-6.
 disadvantages of indirect rule to, in Union of S. Africa, 530.
 education, university, Union of S. Africa, 1211-12.
 initiation ceremonies, 24-5.
 land tenure customs of tribes in Kenya and Tanganyika studied, 838.
 language: 21; formulation of terminology in Union of S. Africa, 84; group, 74, 75, 88; in Madagascar, 75; number in Union of S. Africa, 82; research in Union of S. Africa, 18; studies, University of Capetown, 1211; study of, in universities, 73; study, subsidies withdrawn, 73.
 law, codification in Natal, 358-9.
 lobolo (bride-price), cattle important for payment, 22.
 natural law, possible evolution of, 305.
 migrations, 22, 74.
 negro influence on, 19.
 political organization, Lacustrine kingdoms formed, 23-4.
 questions, systematic research, Union of S. Africa, 1211.
 racial fusion in, 20.
 religion, basis of beliefs, 25-6, 29-32.
 stock-keeping amongst, 22.
 studies: Fort Hare Native College, 1818; fostered by S. African universities, 1211; in Union of S. Africa, 53-4; Studies Department, Witwatersrand University; *see under* Universities; Study Circles formed, National Union South African Students, 1211.
 villages, forms of, 23.

Bantu Linguistic Terminology, by Dr. C. M. Doke, 100.
Bantu Mirror, *The*, S. Rhodesia newspaper, 85.
Bantu Studies, University of Witwatersrand publication, 53.
Bantu World, vernacular paper, 1295.
 Bargery, Dr. G. P.: compilation of Hausa dictionary, 92; linguistic studies, 72.
 Bari language, 77.
 Barnes, Father, chairman Language Research Committee—Southern Rhodesia, 85.
 Barotseland, *see under* Northern Rhodesia.
 de Barros, João, Portuguese historian, 1485.
 Barth, Heinrich, 1310.
 'Basic English', use for books read by natives, 1293.
 Basuto people, political organization, 23; *see also under* High Commission Territories.
 Basutoland, *see under* High Commission Territories.
 Bataka: Buganda clan chief, land rights, 762; tenure question, 851.
 Bathoen, Bechuana chief, opposition to administrative reorganization, 411-12.
 Bauchi, physical features of, 3.
 Bayer, 205; use for trypanosomiasis, 1133.
 Beach, Dr. D. M., phonetic research, 75.
 Beecroft, Mr., British Consul, 133.
 De Beers: diamond control, 1509; Diamond Corporation Ltd., organized, 1511-12; railway construction powers, 1567.
 Beit Trust: aviation grant, Rhodesias, 1601; bridge construction and maintenance grant, N. Rhodesia, 1553; education scholarships, European, 1259; Frankenswald estate acquired for pasture research, 945; N. Rhodesia public debt assistance, 1438; road and bridge construction in S. Rhodesia, 1552; S. Rhodesian engineering scholarships and fellowships, 1225; S. Rhodesian scholarships and bursaries provided, 1224-5; study fellowships for S. Rhodesian administrative staff, 223.
 Bégué, L., forests, Ivory Coast, publication on, 1012.
 Belfield, Sir H. C.: Gold Coast land legislation investigation, 777; Kenya natives overstocking proclivities, dispatch on, 812.

Belgian Congo.**AGRICULTURE:**

concessions system, government policy, 981.

CROPS: beeswax, native production, 891; cacao, native cultivation, 909; coffee—European production, 924; —native cultivation, 911; cotton, native cultivation, 906; fruit, European production, 928; groundnuts, native cultivation, 899; jute, native production, 890; maize—compulsory native cultivation, 893; —native cultivation, 893; millets, native cultivation, 894; palm products, native production, 914; potatoes, native cultivation, 889; rice, native cultivation, 895; rubber—cultivation, 1016; —native, 890; tea, European production, 924; wheat, native cultivation, 889.

Director of, peasant proprietorship policy discussed, 862.

European: bananas, 920; cinchona, 920; coffee, 920, 924; fruit, 920; palm concessions, 919–20; rubber, 920; tea, 920, 924.

livestock: breeding importations, 931; cattle, quarantine regulations, 936–7; dairying, butter and cheese, European production, 943; sheep, government breeding work, 932; stock-breeding, 977; stock farms, Nioka, 977.

native: compulsory cultivation, 629, 633–4; cotton—prices and compulsory cultivation, 634–5; —and sales to companies at fixed prices, 634; education, demonstrators from Union of S. Africa employed, 1222; 'educative' cotton growing, 906; 'educative' cultivation, 893, 906, 911; government policy, 1402; shifting cultivation, 22.

official publications, 958.

research, 953.

Baudouinville mission school, 1271.

Berlin Act includes, 1341.

Bourses du Travail, labour recruitment, 645.

Broadcasting, 1299.

Bushongo people, political organization of, 23.

Capital: investment, railways, 1593; investment returns, 1401–2; foreign

Belgian Congo—Capital (cont.)

investment, 1318; —amount per head, 1319; public listed, amount, 1320.

Census, 120.

Cinema, regulation and control, 1304.

Civil service: conditions of service, 242–3; departmental organization, 244–5; divisions, 242; method of appointment, 243; number of personnel, 244; recruitment system, 245; training, 242.

Colonial Charter, provisions, 206 ff.

Colonial policy, public interest, 143.

Colonization, question, 1401.

Companies, *see under* Belgian Congo, industrial concerns.

Concessions: forest exploitation, 1007–8; mineral rights, 1520; policy, 1401; railway, 1593; system revised, 792–4.

Constitution of, 140, 206–12.

Congo Kasai region, taxation, native direct, incidence, 593.

Co-operation: European, 1480; native, 1480.

Corporal punishment, 312–13.

Croix rouge du Congo, *see under* Belgian Congo, health and medicine.

ECONOMIC SYSTEM: government as shareholder in companies, 141; European, summary and conclusions, 1658; self-sufficiency policy, 1392–3.

EDUCATION:

European, mission schools, 1273.

native: character and policy, 1282–3; content, objections to literary, 1275; early history, 1271–2; free, 1273; girls, *écoles ménagères agricoles*, 1273; industrial concerns, schools maintained by, 1273; industrial employees, 491, 524, 535–6; inspection system, 1273; language medium, French, 1275; language policy, 1275; medical assistants, 1186, 1275; medical auxiliaries, schools, 1273; medical subordinate staff, 1192; medical training, Léopoldville, 1183; missions—official policy towards, 1270; —place assigned to, 1269–71; —Protestant, participation in, 1270; —Roman Catholic, predominance, 1270–1; —vocational training, 1271; 'native administration' schools experiment, 1272–3; 'official' schools, finance and control, 1273; organization, 1271–5; policy, 1656; —cultural future of

Belgian Congo—Education (*cont.*)

Africans, 1271;—summary and conclusions, 1656;—use made of Roman Catholic Missions, 1270-1; religious aspect, 1282-3; schools, 1272-3; technical, *Force Publique*, 1273; vocational, 1273.

Elisabethville Town, sanitary service, 1126.

Erosion, extent and control measures, 1106.

EXPORTS: beeswax, 891; copper, destination, 1329; cotton, native grown, 906; diamonds, 1515; groundnuts, 899; maize, native-grown, 893; minerals, 1402, 1508; palm oil, 1332; palm products, 920; percentage to Belgium, 1331-2; rice, native-grown, 895; rubber, 920; uranium, 1536.

FINANCE, PUBLIC:

budgetary control by Belgian Parliament, defects, 209.

companies, government interest, 1454-5.

debt: 1454; increase, 1356.

development expenditure, 1401.

expenditure: 1454-5; roads, 1563-4; statistics, 1456.

grant from Belgian Government, 1357-8.

metropolitan assistance, 1454-5.

mining revenue, 1462.

native tax revenue, 1459.

non-native direct tax revenue, 1459.

railways, 1592-3, 1593-4.

revenue, 1454-5.

Fomulac: native medical training school, 1186; organization, 1178; work, 1180.

Foréami: demographic work, 121; finance and expenditure, 1179; financial aid, leprosy campaign, 1143; health service, work of, 1179; malaria control measures, 1126; organization, 1178; staff, 1179; tuberculosis amongst Africans, medical officers' opinion, 1140.

FORESTS: concession area, 1008; concession of produce monopoly, 792; conservation measures, 1106; economic exploitation, 985, 1007; forestry service, 1007; investigations, 1012; obligatory tree planting, 141; policy, summary and conclusions, 1652; produce marketing, 1009; products, rubber cultivation, 1016; reafforestation,

Belgian Congo—Forests (*cont.*)

1008; research, 1009; reserves, 1007-8; stations, Yangambi, 1008.

GOVERNMENT: administrative, divisions, 243-4; annual reports published, 208-9; Belgian Parliament's powers, 206; Commission for the Protection of Natives, composition and duties, 208; *conseil du gouvernement*, composition and functions, 211; future developments, 203; Governor-General—appointment, 207;—powers, 210-11; Provincial Commissioners' powers, 211; political and social objectives, summary and conclusions, 1641; urban districts, advisory councils authorized, 211; Vice-Governor-General's powers, 211.

HEALTH AND MEDICINE: agricultural leper settlements, 1143; child mortality in Lower Congo, 128; child welfare, *Berceau Kasai*, 1180; malaria prophylaxis, *Foréami* service, 1126.

DISEASE: leprosy—cases treated, 1143;—and incidence, 1143; malaria, control measures, and incidence, information regarding, 1125; plague, endemic centre for, 1135; trypanosomiasis, control and restrictions on population movement, 1133; tuberculosis, 1140; typhoid fever epidemics, 1148; typhus (louse), possible prevalence, 1138; venereal, 1146; yellow fever, endemic area, 1128.

HEALTH SERVICES: administrative divisions, 1178; commercial companies' provision, 1180; *Croix rouge du Congo*—leprosy campaigns, 1143;—native medical training by, 1192;—organization, 1178;—work of, 1179-80; *Équipes de prospection et traitement*, work on trypanosomiasis, 1133; *Foréami*, see under Belgian Congo, *Foréami*; *Fomulac*, see under Belgian Congo, *Fomulac*; hospitals, state, accommodation and patients, 1180; intensive campaign method, value, 1152; laboratories, 1178; mobile medical units for trypanosomiasis work, 1133; native medical assistants, training, 1186, 1274-5; native subordinate staff—medical schools, 1273;—and training, 1183, 1192, 1274; organization, summary and conclusions, 1654; *Sadami*—missionary organization,

Belgian Congo—Health and Medicine
(*cont.*)

1179;—organization of, 1178;—staff, 1179;—native medical training facilities, 1186; state services, 1178;—their staff and expenditure, 1180-1; unofficial organizations, 1178.

medical passports for trypanosomiasis, 1200.

missionary work, 1115, 1119, 1179.

policy: adopted in payment for treatment, 1201-2; in method of intensive campaigns, 1195-9; in employment of missions for medical work, 1195-6.

research on leprosy, 1143.

survey of leprosy (1930), 1173.

Housing, native, in industrial areas, 523-5.

Import duties, customs tariff, basis, 1345.

IMPORTS: from Belgium, proportion, 1335; government, difficulty of distinguishing, 1340; Japanese, percentage of, 1337.

INDUSTRIAL AND COMMERCIAL CONCERNS:

Afco, reafforestation work, 1008.

Agrifor, see under Belgian Congo, industrial concerns (*Société Industrielle et Forestière du Mayumbe*).

Belgian Government financial interest, 1401.

Comité National du Kivu: concession granted, 793; mineral concessions held, 1508, 1520.

Comité Spécial du Katanga: concession, terms, 792; formed for mineral development, 1506; forest service, 1007; mineral concession, 1520.

Compagnie Cotonnière Congolaise (Cotonco), native cotton production assisted, 906.

Compagnie de Kasai, rubber concession, 791.

Compagnie des Chemins de Fer du Congo (C.C.F.C.), fleets maintained by, 1548.

Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs Africains (C.F.L. or Grands Lacs): concessions granted to, 793, (mineral) 1508, 1520; government schools attached to, 1272.

Compagnie du Chemin de Fer du Bas-Congo au Katanga (B.C.K. or Békka), technical schools maintained, 1274.

Belgian Congo—Industrial and Commercial Concerns (*cont.*)

Compagnie du Congo, native reserves in, 791.

Compagnie du Katanga: Comité Spécial du Katanga formed for mineral development, 1506.

Compagnies Réunies des Huileries du Congo Belge et Savonneries Lever Frères (Huilever): concessions granted to, 793; Congo river fleet, 1548; health services, 1180; native employees, living conditions, 524; native rights in area of, 794-5; palm concessions of, 919-20; palm-oil concession, 1401; schools maintained, 1275; welfare work, 681-2.

Compagnie Sucrière Congolaise, concession granted to, 793.

companies in, 141.

educational institutions, 1273.

Exforka, see under Belgian Congo, industrial concerns (*Exploitation Forestière au Kasai*).

Exploitation Forestière au Kasai (Exforka), reafforestation work, 1008.

finance, 1401.

Forminière: diamond mining, 1515; dispensers trained, 1274; health services, 1180; native employees, living conditions, 523-4; reafforestation work, 1008.

Huileries du Congo Belge, see under Belgian Congo, industrial concerns (*Compagnies Réunies des Huileries, &c.*)

Huilever, see under Belgian Congo, industrial concerns (*Compagnies Réunies des Huileries du Congo Belge, &c.*)

Kilo-Moto mines, see under Belgian Congo, industrial concerns (*Société des Mines d'Or de Kilo-Moto*).

labour recruitment for, 645.

Maco, see under Belgian Congo, industrial concerns (*Messageries Automobiles du Congo*).

Messageries Automobiles du Congo (Maco), motor service, 1536.

Otraco, reafforestation work, 1008.

profits tax, 1455.

Régie Industrielle des Mines de Kilo-Moto: capital, ownership, 1508; gold mining by, 1507-8.

social services for employees, 524.

Société des Mines d'Or de Kilo-Moto: educational system for employees, 524;

Belgian Congo—Industrial and Commercial Concerns (*cont.*)

health services, 1180; mortality rate of employees, 681; organization and capital, 1508; schools maintained, 1274; welfare work, 681.

Société Industrielle et Forestière du Mayumbe (Agrifor), reforestation work, 1008.

Société Générale, financial control, 1401.

Société Internationale Forestière et Minière du Congo, *see under* Belgian Congo, industrial concerns (*Forminière*).

Société Minière de Bécéka, diamond mining, 1515.

Tanganyika Concessions, mineral development rights, 1506-7.

technical education, schools maintained for, 1273.

Unatra, *see under* Belgian Congo, industrial concerns (*Union Nationale des Transports Fluviaux*).

Union Minière du Haut-Katanga: dispensers trained, 1274; European employees, reduction, 692; formation, for mineral exploitation, 1507; health services, 1180; labour recruitment agency, 655; mineral production, 1507; mortality rate of employees, 681; native employees, living conditions, 524; schools maintained, 1274; survey work, 8, 1517; welfare work, 681.

Union Nationale des Transports Fluviaux (Unatra), Congo river fleet, 1548.

Industries, metal, 1536.

Inéac (Institut National pour l'Étude Agronomique du Congo Belge): cacao plantations begun, 909; forestry work, 1008.

Institut National pour l'Étude Agronomique du Congo Belge, *see Inéac*.

Judicial system, 291-4.

administrative officers, powers, 292.

Charte Coloniale, principles, 291-2.

courts: of appeal, 293; Brussels *Cour de Cassation*, 293; criminal, 293-4; district, 293; *extra-coutumier*, 293-4; native, 293-4, 304, 305, 492; native non-tribal, 293, 304; 'professional' non-native, 292; territorial, 294; *Tribunaux de Centre, Chefferie, Parquet, Police, premier instance, Secteur*, 293-4.

Parquet, composition and functions, 292-3.

professional justice, 292, 301.

reorganization (1923), 292.

Belgian Congo (*cont.*)

Kasai region, labour recruitment, 645.

Katanga region: aerial survey, 11; forests, ecological studies, 1012; fruit production, 928; industrial area, coal supplies, sources, 1495; labour recruitment, 645; labour situation during depression, 647; land, native, mineral prospecting regulated, 1522; mineral concessions, 1506-7; schools, language used, 1275; survey by *Union Minière*, 1517; taxation, native direct, incidence, 593.

Kingwana language used, 1275.

Kisantu: medical school (native) projected, 1186; mission school, 1271; subordinate staff training, 1192.

Kivu area, colonization suggestions, 823.

Kongo language used, 1275.

LABOUR, EUROPEAN, government's attitude, 141.

LABOUR, NATIVE:

Advisory Committee (permanent), appointment and functions, 646.

Advisory Council, 680.

attempts to stabilize, 649.

Commission of Inquiry, 645-6, 702.

Commission (1930) recommendations, 647.

communal labour, regulations governing, 612.

compulsory: agricultural, powers, 633-4; educative, 621; extent remaining, 1403; railway construction, 1593; regulations, 614, 621.

conditions, reform of, in *Charte Coloniale*, 644-5.

contract, transport regulations, 658.

craftsmanship, traditional, 1428.

customary labour for development, 493-4.

dietary, prescribed, 1124.

employees, numbers, 607, 1402.

governmental policy, 692.

industrial employment, 1427-8.

industrial employment policy contrasted with Union of S. Africa, 1274.

inspectorate, 680-1.

migration: 702-3; and control, 708-9; exodus to Uganda, cause, 647.

miners: mortality rate, 681; recruitment and welfare, 681.

nutrition regulations, 680.

Belgian Congo—Labour, native (*cont.*)
 offences, penalties, 661-2.
 oil plantations, recruitment for, 651.
 pass system, 671.
 policy: 141; auxiliaries, use of, contrasted with French dependencies, 1274; colour-bar non-existent, 141.
 portage restricted, 629.
 recruitment, external: for miners, 645; for government by *Office du Travail*, 645.
 recruitment for private employment: administrative officers' interest in, 698; by *Bourses du Travail*, 645; defects of system, 645; history of, 644-8; native treasury bonus system, 650; official pressure, 650; organization, present position, 655; permissible percentages established, 646; rules, 656-7.
 situation, changes (1930), 647.
 skilled employment, 692, 696.
 skilled, special training; 1274.
 supply, 693.
 survey undertaken, 642, 645-6.
 tax-defaulter labour, 621.
 wages, supervision, 695.
 welfare regulations, 680-2.
 welfare work, *Union Minière*, 1507.
LAND:
 alienation: to non-natives by private purchase, control of, 827; to non-natives by natives, regulation, 825; to non-natives by state, terms, 826.
 concessions: area affected, 792-4; freehold grant, 792; Free State policy, 790-2; native rights in, 794-5; railway, 1593.
 mineral rights, 1520.
 native: delimitation, 794; rights—expropriation under Free State, 791; —and protection, present position, 794; sale, supervision, 794.
 Reserves, demarcation under Free State, 791.
 state control, 791.
 state rights claimed, 823.
 tenure: 141; *Conservateur des Titres Fonciers*, functions, 862; *enregistrement*, process of, 862; native customary modifications, 862; native rights, position of, 862-3; studies of, 840-1; systems, 831; titles, extent of recognition, 862; vacant lands misinterpreted by government, 837.

Belgian Congo (*cont.*)
LANGUAGE: conference, 96; European, French replacing Flemish in education, 1275; native, 1275.
 Languages in, 95-6, 1275.
LAW: character of, 277-9; compared with French, 278-9; land titles valid under, 802; legislation by ministerial decree criticized, 279-80; methods of legislation compared with British and French, 279-80; native customary recognized, 277-8; position of native courts, 278; sources of, 277; venereal disease, compulsory treatment, 1146.
 Legislation: constitutional provisions regarding, 206; Governor-General's powers, 210.
 Léopoldville Town: medical school, 1183; and native training, 1186, 1192.
 Libraries, 1293.
 Lingwala language, use of, 1275.
 Luba language, use, 1275.
 Lula, *Intac* experimental station, 953.
 Lunda people, political organization of, 23.
 Marketing, forest produce, 1009.
 Meteorological service, 15.
MINERALS: copper deposits, 1506; development and transport, 1604; diamonds, 1514-15; gold, 1507; gold refinery, 1536; metal industry, 1536; rights, ownership, 1520; tin smelting works, 1536; uranium, 1507.
MINES:
 Belgian Government investment in: 1401; capital investment, 1322.
 coal, Luena Collieries production, 1495.
 copper, production, 1507.
 development: concerns, state participation, 1516; summary and conclusions, 1660.
 diamond: area and exploitation, 1514-15; government interest, 1515; production, 1515.
 gold: 1507-8; state enterprise, 1516.
 government interest, 1530.
 health services maintained by companies: 1180; malaria control, 1126.
 Kilo-Moto: transport facilities, 1543; labour policy, 681; labour recruitment for, 645.
 migration to, 702-3.
 mortality rate of employees, 681.
 railway development conditioned by, 1591.

Belgian Congo—Mines (*cont.*)

regulations, 1528.
 resident labour encouraged, 497.
 revenue contribution, 1462.
 taxation, 1531-2.
 uranium, 1507.

Missions: Benedictines, medical work, 1119; Franciscans, medical work, 1119; *missions nationales*, medical work, 1179; mortality among missionaries, 1117; 'national' and 'foreign', numbers, 1270; native medical training, 1192; Protestant—*Conseil Protestant du Congo*, language work, 96;—recognition in education, difficulties, 1270; qualifications for native education, 1271; Roman Catholic—preponderant influence in education, 1270;—teaching in schools of industrial concerns, 1274;—work on language, 96; White Fathers, medical work, 1118.

NATIVE ADMINISTRATION:

Centres extra-coutumiers: *comité protecteur*, composition and functions, 525-6; functions of *agent territorial*, 525; local authorities, constitution and powers, 525.

chiefs: appointment, 491; employment in taxation, 600; position, 535; salaries, 494; status and functions under 1933 Decree, 492-3.

circonscription, as unit of, 493-4.

councils of notables, composition and competence, 493.

detribalized native, *centres extra-coutumiers*, 545.

indirect rule theory recommended (1904), 491.

industrial areas, development of permanent population, 523-4.

judicial system in *centres extra-coutumiers*, 526.

native authorities: absence of traditional, effect on policy, 536; classes and functions, 492-3; formation and numbers, 491-2; grouping into sectors, 492; labour recruitment, 647, 648.

native councils, 492.

native treasuries: bonus for recruitment, 650; contributions from cotton sales, 634; remuneration of development work in *circonscriptions*, 493; revenue and expenditure, 494.

Belgian Congo—Native Administration (*cont.*)

non-tribal natives, 523-6.

non-tribal settlements of soldiers, 496.

schools, experiment, 1272-3.

social services for industrial natives, 524.

summary and conclusions, 1645-6.

transitional policy, reasons, 535-6.

tribunals recognized, 492.

urban native: living conditions, 524-5; special provisions, 543; trading by, 525.

Native 'immatriculation', 121, 211.

Native production, compulsory regulations, 141.

Native Protection Commission, and labour recruitment, 647.

Nioka, stock farm, 953.

Nutrition, labour dietaries, 1124.

Office du Travail, labour recruitment, 645.

Officials, European, use of, for subordinate work, 1275.

Palm groves, native tenure rights, study by Duchesne, 841.

Parquet, see under Belgian Congo, judicial system.

Population: 105; decrease, 120; density, 2; depopulation, 105; enumeration, 120-1; sample surveys, 129.

Press, vernacular publications, 1295.

RAILWAYS: B.C.K. (*Chemin de Fer du Bas-Congo au Katanga*), 1592, 1593; *Chemin de Fer du Congo*, 1592, 1593; *Chemins de Fer du Congo Supérieur aux Grands Lacs Africains*, 1592, 1593; *Chemin de Fer du Mayumbe*, 1592; *Chemins de Fer Vicinaux du Congo*, 1592; *Comité Permanent de Co-ordination des Transports*, composition and functions, 1594; compulsory labour on construction, 614; concession development, 790, 792; Congo-Nile project, 1591-2; construction, policy, 1592-3; finance, 1401-2, 1593-4, 1606;—state participation, 1604; gauges, 1593; government interest, 1592-3; Katanga concession, 1594; Léopoldville-Port Francqui plan, 1592; Matadi-Léopoldville line, system, 1591; mileage (1935), 1592; mining influence on lines, 1591; native labour, health, 1593; policy, 1591; Uvira-Costermanville section, 1541.

Belgian Congo (cont.)

- Records: government officers' note books, social value, 49-51.
- Reports, comprehensive annual publication, 1615.
- ROADS: classification and mileage, 1563; maintenance cost, 1563-4; motor, mileage, 1563.
- Roman Catholic Church: territorial organization, 1271; *see also under* Missions.
- Sadami*, *see under* Belgian Congo, health and medicine (health services.)
- Sami*, *see under* Belgian Congo, health and medicine (health services).
- Social services, native urban, 524.
- Survey: geological, by mining companies, 1517; mapping programme, 1517; projection scheme, 9.
- Swahili language, Kingwana form of, 1275.
- TAXATION:
 - income, yield, 1456.
 - mining profits, 1531-2.
 - native direct: assessment and collection, 593, 600; *centres extra-coutumiers*, 525; contributions to native treasuries, 593; defaulters, penalties, payment by labour, 593, 621; early history of, 593; functions of chiefs, 600; incidence, 593; revenue from, 1455, 1459.
 - non-native direct: income tax, 553; revenue from, 1459.
- TRANSPORT:
 - air: early use of, 1602; expenditure, 1602; gold and diamonds carried, 1603; trans-African — *Régie Air Afrique*, 1598; — *Sabena* service, 1598.
 - Comité Permanent de Co-ordination des Transports*, 1594.
 - Marine du Haut Congo*, 1548.
 - water: river system, 1547-8; and Congo river fleet, 1548; and *Marine du Haut Congo*, 1548.
- Tsetse-fly areas in, 1129.
- Vital statistics, 121-2; registration, 114.
- Wireless communications, 15.

Belgian Congo, Provinces and Districts.

- LUSAMBO PROVINCE: Bibanga, leper village, 1143; Pawa, leprosy research laboratory, 1143.

Belgian Congo—Provinces and Districts (cont.)

- STANLEYVILLE: *centres extra-coutumiers*, revenue, 525; leper villages, 1143; Uélé Népo, leprosy survey (1930), 1143.

Belgium.

- Agricultural institutes, anthropological courses, 56.
- Agricultural research institutions, 953.
- Anthropological studies, 55-6.
- Berlin Act, signatory, 1341.
- Brussels: colonial mapping programme, 1517; State Botanical Gardens, tropical plant collections, 953.
- CHARTRE COLONIALE: 644-5; provisions, 206 ff.;—labour, 644-5; religious liberty in Belgian Congo guaranteed, 1270.
- Colonial Commission, Congo Railways criticisms, 1593-4.
- Colonial Congress held periodically, 209.
- Colonial Council: composition and powers, 207; compulsory agricultural production discussed, 633; value of, 209-10.
- Colonial expert commissions employed, 207-8.
- Colonial Minister: labour recruitment, 46; powers, 206-7, 210; present labour policy of, 650; speech on labour, 647.
- Colonial Ministry: financial aid, leprosy campaign, 1143; instruction on compulsory agricultural production, 630.
- COLONIAL POLICY: compulsory agricultural production, attitude towards, 630; Commission for the Protection of Natives set up, 208; cultural future of Africans, 1271; education, place of religion in, 1270; 'Europeanization' of natives not desired, 495-6; experimental stage in Congo, 495-6; finance, governmental investments, 1401; historical development, 140-1; indirect rule theory recommended (1904), 491; land, peasant proprietorship advocated, 862; Minister's control, 210; native administration, summary and conclusions, 1645; political and social objectives, summary and conclusions, 1641; Ruanda-Urundi

- Belgium—Colonial Policy (*cont.*)
 system, 494-5; status of Africans, 140;
 stimulation of public interest, 208-9.
- COLONIAL SERVICE: anthropological
 studies, 55-6; languages studied, 1-2;
 medical, 1178; training, 242.
- Congo report published annually,
 208-9.
- École Coloniale*, training for colonial ser-
 vice at, 242.
- Erosion in colonies, publication, 1106.
- Exports: charcoal, Belgian Congo,
 1495.
- Grant to Belgian Congo, 1357-8.
- IMPORTS: copper, 1332;—from Belgian
 Congo, 1329; cotton, 1332; sisal,
 1332; total proportion from African
 dependencies, 1333.
- Institut de Médecine Tropicale Prince
 Léopold*: 1178; financial aid, leprosy
 campaign, 1143.
- Institut National pour l'Étude Agronomique
 du Congo Belge (Inéac)*, cacao produc-
 tion work, 909.
- Language institutions, 71.
- National Colonial Congress, Permanent
 Committee and population question,
 105.
- Parliament, Congo agricultural system
 criticized, 635.
- Public opinion and labour recruitment
 in Belgian Congo, 40.
- Royal Colonial Institute founded, 209.
- Société Générale de Belgique*, mineral
 development, Belgian Congo, 1506.
- Treaty of St. Germain ratified, 1342.
- Terveuren, *Musée du Congo Belge*,
 botanical department, 953.
- Bélimé, M.: Director-General, *Office du
 Niger*, 1050; Niger basin irrigation,
 investigation, 1249.
- Bell, Sir H., Uganda trypanosomiasis
 epidemic, control measures, 1119-20.
- Bemba language: 85; articles published
 in, 86; orthography, 81.
- Bemba people, labour migration, 702.
- Bena people, political organization, in
 Tanganyika, 23.
- Bennie, W. G., linguistic work, 84.
- Benue river, British penetration, 133;
 system, 3.
- Benue-Cross rivers, languages, 76.
- Berbers, racial classification of, 19.
- Berlin Act: area covered by, 1341;
 Congo navigation provisions, 1548;
 missions privileged under, 1269; pro-
 visions and signatories, 1341; *see also*
 Congo Basin Treaties.
- Berlin Conference (1884), territorial
 claims in Africa regulated, 1310-11.
- Berlin Convention, Congo railway policy
 defined, 1591.
- Berliner Gesellschaft für Anthropologie*, publi-
 cations, 56.
- Bertin, M., trees of W. Africa, publica-
 tions on, 1011.
- Bible: translation, 68, 69, 1294-5; trans-
 lation (partly) into Dagomba, 94;
 translation—into Fante, 94;—Hausa,
 92;—Nupe, 92;—Tangale, 92;—Tiv,
 92;—Tonga, 83;—'Union Ibo', 91.
- Bini language, 74, 91.
- Biological Standardisation, Permanent
 Commission on, *see under* League of
 Nations; Health and Medicine.
- Birth-rate: 127-8; labour migration and
 effect on, 705; marriage customs, effect
 on, inquiry needed, 1639.
- Biya, Esu, land tenure of Temne people,
 840.
- Blackburn Aviation Company, air ser-
 vice work, Africa, 1594.
- Blacklock, Dr. Mary, report on welfare of
 women and children in colonies, 1231.
- Bleek, Miss D. F., study of Bushman
 dialects, 75.
- Bleek, Dr. W. H. I.: philological scholar,
 68; study of Bushman dialects, 75.
- Blyth, Captain M., policy when chief
 magistrate in Transkei, 351.
- Boas, Prof., lecturer in linguistics at
 Columbia University, 101.
- Boers, *see under* Union of S. Africa.
- Bolton, J. R., and Davy, J. Burtt,
 Uganda Forestry check list compiled,
 1010.
- Bongo-Baka-Bagirmi language, 76.
- Bonnat, M., Tarkwa mines discovered
 by, 1502.
- Bonny language: 92; and river transport
 use, 1545.
- Books for Africa*, 70.
- Books: distribution problem, 1296; Euro-
 pean, native demand for, 1293-4;
 International Committee on Christian
 Literature in Africa, 1294; language
 difficulty, 1294; native, prizes for,
 1295; storage difficulties, 1296; ver-
 nacular—production cost in, 1296;—
 reading circles, 1296.

Borana people, description of, 29.
 Botany, research, lines of inquiry indicated, 1613.
 Botha, Gen. L.: land policy, 721-2; opinion on neutrality question, 147; Prime Minister of Union, 145; resigns and reforms government, 145.
 Boynton, Dr., rinderpest spleen vaccine first used by, 934.
 Brabant, Duke of, *see* Leopold III.
 Brévié, J., Governor-General of Fr. W. Africa: co-operative policy, 1478; native council system introduced, 489-90; native law and customs, inquiries, 1614; native taxation reduced, 589; ordinance issued regulating election of chiefs, 487-8; quoted on need of population records, 122-3; stresses social value of court records, 50; urges administrative decentralization, 240.
 Bride-price, *see* Lobolo.
 British Bechuanaland, *see under* High Commission Territories.
 British Central Africa Company: Nyasaland concessions acquired, 755; Nyasaland mining rights, 1497.
British Dependencies.
 AGRICULTURE:
 compulsory production, powers, 631-2.
 crops: cocoa production, 1332; sisal production, 1332.
 cultural methods, control of fires, native authorities used, 1068.
 education of Africans in, 964-8.
 official publications, 957.
 research, 1622; policy—appointment of specialists, 954;—lack of co-ordination, 935.
 ANTHROPOLOGY, policy of administrations, 1637.
 BROADCASTING: cost and control, 1298-9; local services, 1299; report on, recommendations, 1298-9.
 CAPITAL:
 foreign investment, 1318;—amount per head, 1319.
 public listed: amount, 1319; and forms of, 1320.
 CINEMA, 1302: censorship, 1302;—recommendations of Colonial Films Committee, 1301; educational use of, 1302; films for Africans, recommendations of Colonial Films Committee, 1300-1.

British Dependencies (*cont.*)
 'Colonial' courts in, *see under* British Dependencies, judicial system.
 Colonial policy, indirect rule, development under system, 540-1.
 COLONIAL SERVICE: 224-33; accounts system criticized, 232-3; administrative branch, 224-5; African employment in, 224, 233, 964-8;—summary and conclusions, 1641-2; Asiatic staff, 233; branch for Africa suggested, 232; Colonial Regulations governing, 224; departmentalization of, 228; forestry co-operation suggestions, 1019-20; forests research organization, 1008-9; lack of co-ordination, 228-9; leave provisions, 225; method of appointment, 224; pay, effect on trade balance, 1350-2; recommendations for reorganization, 229-31; salaries, 225; secretariat, 225, 227; statistics of European personnel, 226; technical and administrative co-ordination problem, summary and conclusions, 1642; transfer of personnel, 231;—summary and conclusions, 1642.
 Co-operation, native, 1471-7.
 Corporal punishment, 312-13.
 Defence, finance, 1445-6.
 ECONOMIC DEVELOPMENT: companies share in, 1313; single product production, disadvantages, 1327-8.
 EDUCATION, EUROPEAN: 1259-60; libraries, 1292-3.
 EDUCATION, NATIVE:
 Achimota College, *see under* Gold Coast, education, native.
 administration, lack of co-ordination, 1233-4.
 adult, Commission's recommendation, 1233.
 advisory boards, recommendations as to, 1230.
 advisory bodies, composition and functions, 1238-9.
 Advisory Committee: recommendations, 1231; set up (London), 1229.
 advisory committees: missionary representation, 1238-9; native representation, 1238-9.
 agricultural: 1246-7; training, 964-8.
 boards, missionary and native representation, 1238-9.

British Dependencies—Education, Native (*cont.*)

- characteristics of system, 1207.
- chiefs' sons, facilities and policy, 1256-7.
- cinema used for, 1302.
- content and aim, declaration regarding (1925), 1229.
- content and scope, 1231.
- co-ordination of policy urged, 1283.
- cultural agencies, 1304.
- English, use as medium for, 1258-9.
- examinations: British Joint Advisory Board, 1253; British system adopted, 1253; Cambridge School Examinations Syndicate, 1254; influence on language policy, 1254; London University, 1254; system, 1234; unsuitability of system, 1253; value of oversea, 1254.
- expenditure: compared with Union of S. Africa, 1214-15; Higher Education Commission's recommendations, 1283.
- fees, school: effect on higher education, 1287-8; policy, 1287.
- female: backward state, 1255; Commission's recommendations, 1253; development recommended, 1231; special problems, 1255.
- Fort Hare, 1248.
- Fourah Bay College, 1248, 1250.
- higher: 1248-50; Higher College of East Africa project, 1248-9; Higher Education Commission's recommendations, 1232-3; financial aspect, 1287-8; opportunities after completion of course, 1289-90; policy determining, 1287-90; type envisaged, 1232-3; university institutions recommended, 1231-3; vocational nature, 1290.
- Jeanes schools, 1252.
- language: medium, 1257-9; medium—Colonial Office Advisory Committee's policy, 1258; —oversea examinations and influence on, 1254; native desire for English instruction, 1285-6; policy, 1230; —difficulties encountered, 1285-6.
- libraries, 1294.
- Makerere College, *see under* British East Africa, education, native.
- Memorandum on Native Policy in East Africa*, policy enunciated, 1231.

British Dependencies—Education, Native (*cont.*)

- mission schools: policy of British Government, 1229-30; supervision recommended, 1233.
- native support and financial assistance, 1239-41.
- policy: 1280-1; of British Government, 1231; contrasted with French, 1261; summary and conclusions, 1655.
- primary: Commission's recommendations, 1233; extent and period, 1242; period, 1234; policy as to character, 1280-2; scope and content considered, 1284-5.
- religious aspect, 1236.
- schools: classification, confusion, 1234; government, 1233-4; missionary—inspection and control, 1235-8;—scope, 1236;—state aid, 1233;—state grants, conditions and calculation, 1236-7;—teachers' registration, 1237;—teachers' salaries, 1237; native authority, 1233; non-government, recognition and control, 1230; Roman Catholic, attitude to non-Catholic, 1236; technical, definition and functions, 1245-6; trade, definition and functions, 1245-6; variety, 1233.
- secondary: Commission's recommendations, 1233; extent and areas available, 1242-3; Higher Education, Commission's report on, 1242-3; period, 1234.
- state control, increase in advocated, 1283-4.
- statistics, 1259.
- system criticized, 1234-5.
- teachers: need for, 1235; salaries, 1252; standard, 1250; training certificate, 1250; training facilities, 1250-3; wives, training, 1255; women, training facilities, 1251-2.
- trade and technical, 1245-7.
- vocational: 1243-8; post-primary inclusion of, disadvantages, 1243-4.
- voluntary system, 1287.
- women, policy regarding, 1229.
- Yaba Higher College, *see under* Nigeria, education, native.
- Empire Marketing Board, 1619.
- EROSION: control co-ordination advocated, 1108-9; expenditure on, control, 1113; policy, co-ordination needed, 1653.

British Dependencies (*cont.*)

EXPORTS: destination, 1329; ground-nuts, 1332; palm oil, 1332.

FINANCE, PUBLIC:

accounts system, 1449.

Colonial Development Fund assistance, 1320-1, 1557.

debt: amount, 1324; burden of charges, 1355-6; interest rates, 1323-4.

expenditure: developmental and social, 1424; inclusion in estimating trade balance, 1350-1; statistics—*table*, 1433;—explanatory notes, 1432-4.

grants-in-aid, 1320, 1446.

imperial assistance: amount, policy and method, 1445-8; estimate of, 1448.

imperial organizations, contributions, 1448.

loans: British, 1320; interest and repayment, 1447; policy, 1446-7.

racial contributions, assessment difficulties, 1456-9.

Forests, policy, summary and conclusions, 1652.

GOVERNMENT: Advisory Committees, listed, 161; African representation question, 252-3; Colonial Council proposals discussed, xxi-xxviii; contact with Colonial Office, 161-2; criticisms of present system, 228-9; Crown colony government of, 160-3; devolution as a policy, 248; District Commissioners, duties, 228; divisions in, 227-8; employment of Africans in services, 255-60; executive authority in, 160-1; Executive Councils, 163-73; Governor's position in, 160; ideals affecting form of, 247-8; indirect rule, effect of, on recognition of native customary law, 275; Inspectorate proposals discussed, xxi-xxviii; legislative councils in, 162-73;—functions and future of, discussed, 248, 250;—analyses of, 1339; political and social objectives, summary and conclusions, 1639; Provincial Commissioners, duties, 227-8; recommendations for reorganization, 229-31; re-grouping of administrative units, 173-85; reports, 161;—inadequacy, 1615; representative, 249, 1641-2; self-government question, 135, 250-3; system, summary and conclusions, 1641-2; use of special commissions, 162.

British Dependencies (*cont.*)

HEALTH AND MEDICINE:

disease, malaria, control measures, 1126.

dissemination of information, 1161.

health services: Chief Medical Adviser to Secretary of State, 1159; Colonial Advisory Committee, 1159; Colonial Medical Service, formation, 1159; organization, 1160-1, 1654; payment for, 1202.

hospital system, advantages and disadvantages, 1196.

payment for treatment, policy adopted, 1202.

policy: compared with French and Belgian, 1196; public health work separated from medical, disadvantages, 1196.

research: Colonial Development Fund assistance, 1624; co-ordination, no central institution, 1203; scheme for centralizing, 1204.

IMPORT DUTIES, customs tariffs, 1343-5.

IMPORTS: from Germany, 1338-9; from Great Britain, proportion, 1335; sources, 1335-6.

Indian communities in, 316-44.

JUDICIAL SYSTEM, 285-90.

appeal, rights of and importance, 285-6.

'Colonial' courts, functions of, 286-7; tendency to replacement by native courts discussed, 288-9.

collective punishment, 315.

co-ordination, extent of, 285.

High or Supreme Courts: 285; appointments to, mainly professional, 285.

native courts: appeals from, 287-8; compared with French *tribunaux indigènes*, 297; composition and competence, diversity of, 286-7; composition in non-tribal areas, 287; essential feature of native policy, 286; extent of jurisdiction, policy pursued, 304; graduation, 287-8; problem of supervision, policy, 305-6; safeguards, 289; separation of powers, 287; tendency to increase jurisdiction, 288-9; *see also under* Native Administration.

subordinate jurisdiction: by whom exercised, 285; variations in competence, 285.

British Dependencies—Judicial System
(*cont.*)

subordinate magistrates' courts, in non-tribal areas, functions, 289-90.

Kenya self-government, attitude of Imperial Government, 167-9.

LABOUR, NATIVE:

administrative supervision, defects, 679.
communal labour, policy in regard to chiefs' rights, 610.

compulsory labour: 614-15; policy defined, 616-17.

'foreign contracts', regulations, 658.

labour departments advocated, 679.

offences: categories, 660; penalties, 660.
policy, 692.

private employment: recruitment—
history of, 639, 643;—official aid for,
history, 640-1;—taxation for, 639-
40; rules, 656.

recruitment: by chiefs, position, 649;
and official pressure, 649.

welfare policy: 678-9; supervision recommended, 698.

LAND:

alienations: to alien natives, control by state, 827-8; to non-natives by state, terms, 825-7.

sovereignty, determination, 798-9.

surface measurement system, decision required, 959-60.

LAW: appeal to Privy Council, right of, 271; British Settlements Act (1887) and local legislatures, 271; character of, 273-5; common law and equity in, 270-1; differential legislation, extent of, 274-5; distinction between colony and protectorate, 270-1; Foreign Jurisdiction Act (1890), powers of Crown under, in protectorates, 272-3; Imperial Parliament, rights of legislation, 272; lack of uniformity between territories, 280; local legislation in, 271; methods of legislation compared with French and Belgian, 279-80; native customary, recognition of, 274-5; Orders-in-Council, purpose of, 272; publication of, 280; 'rule of land' in, 273-4; sources of, in colonies, protectorates, and mandates, 270-3; status of natives in protectorates, 272-3; subordinate legislation by native authorities, 274.

Libraries: 1292-3; native, 1294.

Mines, capital investment, 1322.

British Dependencies (*cont.*)

Missions, educational work, 1255; *see also under territories.*

NATIVE ADMINISTRATION: chiefs, employment in taxation, 599-600; native authorities, control of agricultural burning, 1068; native courts in, *see under territories*, Judicial system; summary and conclusions, 1646.

Nutrition, labour dietaries, study, 1124.
Press, vernacular publications, 1295.

RAILWAYS: capital expenditure, state and non-state, 1604; charge on administration, 1606-7; policy, criticisms of, 1607-8.

Records, government officers' note books, social value of, 49, 51, 1615.

Re-grouping of administrative units, 173-85.

RESEARCH:

co-ordination: need for, 1624, 1627; official bodies, 1627; organizations promoting, 1625-6; recommendations, 1631-3.

financial aspect, 1446, 1629-31.

grant-in-aid recommended, 1631.

linguistic, 1621.

metropolitan institutions, increased share recommended, 1628.

organization, 1615, 1620-33.

territorial development, 1617.

Survey: departments, 1516-17; geological, amalgamations suggested, 1517.

TAXATION:

native direct: assessment and collection—
—position of administrative officers, 599;—supervision, 599-600; incidence, compared with French, 595.
non-native direct, 549-52; systems discussed, 553-4.

Trade balance, 1349-52.

TRANSPORT, air: control, 1602; Royal Air Force, work by, 1596-7; subsidies, Imperial Airways, 1601; trans-African routes, Imperial Airways, 1597; *see also under territories.*

Water supply: policy, summary and conclusions, 1653; *see also under territories*; Water Supply.

Weights and measures, system adopted, 960.

BRITISH DOMINIONS: membership of League of Nations, 144; neutrality question, 146-7; secession question, 145-6; status as sovereign states, 144-5.

British East Africa. *See also under territories.*

AGRICULTURE:

Amani Agricultural Research Station:
association with Lyamungu coffee research station, 957; conferences at, 1626; history and functions, 955-7, 1622; grants—imperial, 1446;—Tanganyika, 1448; research done, 956;—long term, 948; staff, 956; veterinary director recommended, 1627.
conferences, inter-territorial, 957, 1626.
crops, wheat, production areas, 921-2.
education, scholarship finance, 1448.
European, large-scale enterprise, 137-8.
native, cash crops, compulsory production, 631-2.
publications, 958.
research, *see under* British East Africa, Amani Agricultural Research Station.
Sisal Tax Board, grant, Tanganyika, 1448.
soil map, provisional, constructed, 956.
veterinary work, Kabete laboratories, proposed development as central institution, 957.
Cinema: film production scheme, Bantu Educational Kinema Experiment, proposals, 1304; government co-operation Bantu Educational Kinema Experiment, 1302.
Civil service: leave provisions, 225; retiring age, 225; salaries, 225.
CLOSER UNION:
Commission of Inquiry: 182-3; and labour policy, 641-2; railway co-ordination plan, 1581; recommendations, 182, 1682; research co-ordination, views on, 1624.
co-operation so far achieved, 184.
Governors' conferences: began, 182; co-ordination of policy, 184; recommendations on, 183.
federation proposals: 181-2; reasons for rejection, 182.
Joint Select Committee of Imperial Parliament on, 183; views expressed by, 168-9.
opposition to plan, 182.
proposals, 167, 182-3.
question, summary and conclusions, 1642.
recommendations, 184-5.
schemes discussed, 180-5.

British East Africa—Closer Union (cont.)

Sir S. Wilson's visit and recommendations, 183.

Statement of Conclusions of H.M. Government, 183.

Colour-bar question, 138.

Co-operation of territories comprising, 167-8.

East Africa Commission, Nyasaland land recommendations, 757.

East African Agricultural Research Station, Amani, *see under* British East Africa, Amani Agricultural Research Station.

Economic system, European, summary and conclusions, 1658.

Education, European and Indian, 1260.

EDUCATION, NATIVE:

examinations: East African School Leaving Certificate recommended, 1254; Higher Education Commission's recommendations, 1254; Joint East African Board, 1254.

factory training, proposed school at Makerere, 998.

fees, school, 1287.

Higher College: formation recommended, 1248-9; grants, 1149; standard envisaged, 1249.

Makerere College: 1248; course for plane-tables, 9; fees, 1287; medical training, 1185; native agricultural training at, 967; secondary education, boys, 1243; standard attained, 1248; teacher training, 1251; vocational training, 1248.

Mulago Medical School: 1248; examination and diploma, 1185; native medical training, 1190; sanitary training course, 1190; students, 1185; training course, 1184-5.

secondary, facilities available, 1242-3. survey, 10.

teachers, Higher Education Commission's recommendations, 1252.

vocational, at Makerere College, 1248.

European community and native paramountcy, 137.

Exports, goat skins, 1079.

Forests, exotic trees, introduction, 1012.

Governors' Conference (1926): compulsory agricultural labour, recommendations, 630; finance, 1448; labour recruitment policy advocated, 641; taxation recommendations, 598.

British East Africa (*cont.*)

Governors' Conference census discussion (1929), 116; in London on co-operation, 167-8; Transport Policy Board recommended (1933), 1581.

HEALTH AND MEDICINE:

conferences, research, 1203-4.

disease: plague outbreaks, 1135; trypanosomiasis, control measures adopted, 1132; yaws and syphilis, prevalence, 1144.

health services: amalgamation, 1120; Asiatic surgeons, employment, 1183; native training as medical assistants, 1184-5.

Joint Examining Board, 1185.

mental institutions, 313.

research co-ordination: conferences, 1161;—Entebbe and Nairobi, 1626; projects, 1203-4; Research Director recommended, 1204, 1627; Standing Medical Committee recommendations for co-ordination, 1203-4.

Immigrant communities' constitutional position in, 168.

Import duties, treaty restrictions on, 1336.

Imports: cotton-piece goods, Great Britain, decline, 1336; government, 1339-40.

Indians, summary and conclusions, 1644-5; *see also under* Indians.

JUDICIAL SYSTEM: Court of Appeal for, 285; Commission of Inquiry, opinions of, 300-7; criminal, Commission of Inquiry, 300-1; exercise of judicial functions, policy of British Government, 285; native courts—and appeals, 306-7;—records of proceedings, 306; penalties, compensation recognized in criminal procedure, 314.

Labour, wages reduction by depression, 693.

Land tenure:

individual, Closer Union Commission's views, 867.

native customary: changes in, 847-53; individual holdings, progress towards, 1429-30.

Language: finance, 1448; Inter-Territorial Language Committee (1930), 90; Joint Parliamentary Committee, recommendation, 89; Swahili as lingua franca in, 88-91.

British East Africa (*cont.*)

Lyamungu coffee research station, 948. Makerere College, *see under* British East Africa, education, native.

Meteorological service, 15; Tanganyika grant, 1448.

Mines: prospecting regulations, 1526; regulations, 1526; taxation, gold royalty system, 1531.

Mulago Medical School, *see under* British East Africa, education, native.

Native administration: indirect rule and representative government, attempts to reconcile, 1639-40; *see also under* Native Administration and territories.

Native institutions and their adaptation for self-government, 136-7.

Native policy in, 136-7.

Nutrition, dietetic studies made, 1123.

Prisoners, employment of, 310-17.

Race relations, Indians, summary and conclusions, 1644-5.

Railways: co-ordination plan, 1581; Mance Report, 1580; traffic and rates agreement, 1580-1.

Segregation policy in, 135.

Survey, employment of Africans, 9.

Taxation: mining, gold royalty system, 1531; native direct—assessment system discussed, 596;—cattle tax investigated, 597.

Trade and Information Committee, finance, Tanganyika grant, 1448.

Trade, native: Indian control, 1420; markets, 1421.

TRANSPORT: air, trans-African financial contribution, Imperial Airways, London-S. Africa route, 1599; communications—co-ordination inquiry, 1555-6;—East Africa Policy Board, 1555; Policy Board recommendation, 1581; railway and road, proposals for lessening competition, 1610.

Tsetse fly, research, 1618.

British East Africa Company: charter granted, 742; Indian settlement plans, 335; land agreement with Kabaka in Uganda, 759.

BRITISH EMPIRE: Air Mail scheme, operation in Africa, 1597; Congo Basin Treaties, advantages under, 1343; exports to, from British territories in Africa, 1329; import duty, preferences, Sierra Leone, imports, Japan, 1343;

British Empire (cont.)

- 1343; research conferences—Commonwealth Scientific (1936), 1625-6;—Empire 1626;—Forestry, 1626;—Imperial Botanic, 1625; research organization, 1615, 1616-19; Statute of Westminster, 146.
- British Guiana, rice from, tested, Sierra Leone, 951.
- British Kaffraria, *see under* Union of S. Africa, Ciskei.
- British Mandated Areas, Crown colony government of, 160-3.
- British Museum, *see under* Great Britain.
- British protectorates, Crown colony government of, 160-3.
- British Somaliland, imports, value per head of population, 1334.

British South Africa Company, 157.

- Bechuanaland interests of, 403.
- citrus research station financed by, 947.
- concessions in N. Rhodesia, 738.
- copper royalty, sliding scale, 1531.
- dam construction in S. Rhodesia, 1039.
- economic advantages from development by, 1379.
- economic development by, 1313.
- finance, budgetary position, 1436.
- labour recruitment by officials, 640.
- Land Bank established, Bulawayo, 1469.
- land policy in S. Rhodesia, 732-3, 818.
- mineral control agreements, 1506.
- mineral rights: acquisition and sale in S. Rhodesia, 1519; in N. Rhodesia, 1461, 1519; in Nyasaland, 1519; in S. Rhodesia purchased from, 1493.
- Mines, gold: concessions policy, 1494; N. Rhodesia, royalties, 1437; policy, S. Rhodesia, 1492; preferential rights, Bechuanaland, 1525.
- Mozambique railway concession acquired, 1572.
- native customary law recognized by, 269-70.
- native rights under charter of, 376-7.
- Nyasaland concessions acquired, 755-6; and mining rights, 1497.
- railway development, Rhodesias, 1571.
- Rhodesia Land Bank formed by, 819.
- Rhodesian Railways: financial aid, 1573; and financial responsibility for, 1602, 1605.

British South Africa Company (cont.)

- settlement founded in N. Rhodesia, 1387.
- share in Wankie coal mining company, 1494.

British West Africa.

- AGRICULTURE: conferences, inter-territorial, 957; crops—palm products, 1402-3;—wheat not grown, 921; exchange visits of specialists, 957; livestock breeding work, 976; publications, 958; research policy, lack of co-ordination, 957.
- Civil service: African employment in, 235; conditions of service, 225; retiring age, 225; salaries, 225.
- Colonial policy in, historical development, 132-5.
- Colour-bar question, 1387.
- Concessions, advantages of system, 1402-3.
- Constitutional status of, 1713.
- Customs and Excise, revenue derived from, 1459.
- Economic system, European: native absorption, extent, 1399; summary and conclusions, 1658.
- EDUCATION, NATIVE: character of, 1244-5; English examination standard, 1245; English influence on, 1244-5; higher, 1248-50; language, native attitude to English, 1286.
- Exports: goatskins, 1079; value per head of population, 1399.
- Finance, public, customs and excise revenue, 1459.
- Forests, exotic trees, introduction, 1012.
- HEALTH AND MEDICINE:
 - disease: yellow fever epidemics, 1127; and preventive inoculation, 1129.
 - health services: foundation, 1120; native training for medical assistants, 1184.
 - mental institutions, 313.
 - research, co-ordination, possible developments, 1204.
 - surveys, leprosy, government and mission, 1142.
- Imports: cotton piece goods, Great Britain and Japan, 1336; government, 1340; quotas imposed, Japanese products, 1336.
- Industries, palm oil, improvement methods, 1402-3.

British West Africa (*cont.*)

Judicial system, Court of Appeal for, 285; native courts and appeals, 306-7.
 Labour, native: contract, use of, 693; craftsmanship, 1428; employees, 1399; industrial employment, 1427; migration, 702; offences, judicial procedure, 660; pass system not used, 671; private employment, use of recruitment, 655; supply, 693.

Land:

alienation to alien natives, state control, 827-8.

tenure: individual, provisions regulating, 868; native customary—changes in, 853-8;—West African Lands Committee investigation, 839; systems, Islamic influences, 832.

Legislative councils, native representation on, 171.

Legislative system in, 171.

Meteorological service, unified, 16.

Mining development, summary and conclusions, 1660.

Native administration: indirect rule and representative government, 1639-40; municipal government, development, 519.

Nutrition, research, poisonous elements in diets, 1123.

Population, 1399.

Prisoners, employment of, 310-11.

Taxation, native direct, cattle tax on pastoral nomads, 597.

Transport, air development, 1660; and rail, reasons for developing, 1604.

See also under territories.

Broadcasting: Belgian Congo, 1299; British areas, 1296-9; educational use of, 1297, 1300; French dependencies, 1299-1300; health propaganda use, 1199; native educational use, 1291-2; organization and expenditure, 1300; Portuguese colonies, 1299; Sir J. Reith's Report, 1296; vernacular programmes, co-ordination of experimental work, 1300.

Brown, Gordon, and Hutt, Bruce, anthropological collaboration, 48.

Bruce, Sir D., trypanosomiasis research, 1130.

Bruce Trust, A. L., Nyasaland Concessions acquired, 755.

Brussels Act, financial provisions, 1342.

Buganda, *see under* Uganda.

van Bulck, Dr., French scholar, Congo languages, 72.

Bulletin de la Société Belge de Médecine Tropicale, 1178.

Bulletin des études scientifiques et historiques, 95.

Bulletin of Hygiene, 1159.

Bullion, production, 1326.

Bunga, Transkeian native General Council, 530; *see also under* Union of S. Africa, Transkei.

Bunyoro, *see under* Uganda.

Bunyoro people, Lacustrine kingdom of, 24.

Bureau of Hygiene and Tropical Disease, *see under* Great Britain.

Burssens, Dr., French scholar, Congo languages, 72.

Burton, Richard, 1310.

BUSHMEN: language, 75; people—area uninhabited, 19;—description of physical characteristics, 18-19;—land tenure rights, 831;—number of, 75.

Bushongo people, political organization, 23.

Busulu, land occupation tribute in Uganda, 575.

Butler, S. G. (Principal, Tsoo Agricultural School), estimates possible increase, native agricultural production, 1412-13.

Buxton, Lord, presides over committee on native questions in S. Rhodesia, 377.

Byatt, Sir H., indirect rule policy in Tanganyika, 435-6.

C

Cadulac, *see under* University of Louvain.

Calabar river, transport system, 1544-5.

Caledon, Earl of, South African Pass Law Proclamation, 664.

Calmette, Professor, tuberculosis tests initiated, W. Africa, 1138.

Cameron, Sir D.:

indirect rule: policy applied, 536; opinion of policy, 134-5.

instructions on administrative officers' sphere of work, 230.

memorandum on application of principles of native administration, discussed, 432-3.

Nigeria: financial reforms, 1443; Governor of, 435; Yoruba land tenure systems, mistakes admitted, 837.

Cameron, Sir D. (*cont.*)

Tanganyika: administration, 434; central council for native affairs envisaged, 531; Governor of, 434; labour recruitment by taxation, views on, 40, 639; native administration, principles laid down, 436; policy in, 436; stimulation of native agriculture, circular, 631-2.
urban native administration, speech quoted, 521.

Cameroon, Mt., rainfall, 12.

CAMEROONS:

agriculture: concessions system, 981; crops, cacao, European plantation cultivation, 907.
climate, 12.
exports, bananas, under German administration, 901.
forests, economic exploitation, 985.
German administration, taxation of labour, 591.
indirect rule policy projected by Dr. Solf, 435.
land: concessions, German control, 787; tenure customs, 840.
languages in, 77.
physical features of, 3.

Cameroons, British Mandate.

ADMINISTRATION: connexion with Nigeria, 433; divisions of, 171.

AGRICULTURE:

crops: bananas—European production, 928;—native cultivation, 902; cocoa—native cultivation, 907;—native co-operative marketing, 1475; rubber—European cultivation, 1016;—native cultivation, 1016.

European: bananas, 928; rubber production, 919.

native co-operation, 1475.

Dikwa, land tenure, rentals by Arabs, 858.

Exports: bananas, 902; percentage to Great Britain, 1330; rubber, 919, 1016.

Finance, public, native tax revenue, 1459.

Forests, products, rubber, 1016.

HEALTH AND MEDICINE: disease, trypanosomiasis, compulsory treatment, 1134; health services, organization, staff, and expenditure, 1167-9.

Judicial system, native courts, 434.

Cameroons, British Mandate (*cont.*)

LABOUR, NATIVE: compulsory labour unnecessary, 620; employees, numbers, 607; plantation employees, 678; welfare provisions, 678.

LAND:

alienation to alien natives, regulations, 856; and leasehold, 775.

concessions under Germans, 774.

Crown, German definition, 774-5.

German policy, 774-5.

mineral rights, 1520.

non-native holdings, 775.

Northern Nigerian legislation applied, 775.

tenure: native sales practices, 856; native sales recognized, 854; systems of Dikwa, Islamic influences, 832.

Languages in, 94.

Legislation, Nigerian Ordinances applicable, 433.

Manife, hill tribes, land sales recognized, 854.

Marketing, agricultural produce union, 907.

Minerals, rights, ownership, 1520.

NATIVE ADMINISTRATION: chiefs' salaries, 434; native authorities—organization and types, 433-4;—and road maintenance, 1559; native courts, 434; native treasuries, revenue and expenditure, 434, 584; non-tribal natives, 496.

Roads: cost, 1559; mileage, maintenance and routes, 1559.

TAXATION:

native direct: allocation of, 584; assessment, 583-4; collection, 583-4; income tax, 583, 584-5; *jangali*, rate, 583; registers of taxpayers, compilation, 584; revenue from, 1459; system, based on Nigerian model, 583.
non-native direct, income, incidence, 550.

Transport, river system, 1545.

Cameroons, French Mandate.

AGRICULTURE:

co-operation, native, 1479.

crops: bananas—concession cultivation, 790;—European cultivation, 902, 928;—native cultivation, 902; cacao—cocoa exports, 1328;—native cultivation, 908-9; cash, compulsory native production, policy

Cameroons, French Mandate—Agriculture (*cont.*)

towards, 633; cassava, native cultivation, 896; coffee—concession cultivation, 790;—and native cultivation, 911; groundnuts, native cultivation, 899; maize, native cultivation, 893; millets, native cultivation, 894; palm products, native production, 914; pests and disease control, 971; rubber—cultivation, 1016;—European plantations, 919; sesame, native cultivation, 900; tea, European production, 924.

European: bananas, 928; cacao, 919; coffee, 924; rubber plantations, 919; tea, 924.

hides and skins, 941.

Loan Board, powers, 1479–80.

research, 952–3.

Ayos Medical School, 1268.

Banks, Agricultural Loan Board, 1479–80.

Capital, public listed, 1319.

Census in, 123–4.

Citizenship, conditions for acquiring status, 200.

Civil Service, continuity of service, 238.

Colonization policy, 789–90.

Concessions, forest exploitation, 1007.

Co-operation: European, 1479; native, agricultural work, 1479; organization and finance, 1479.

Dschang: agricultural station, 952–3; education of chiefs at, 1269; region, native lands, permanent boundaries, 858.

École des Aides de Santé, native training, 1191.

Economic development in, 139.

Education, African: chiefs, 1269; girls, 1266; language medium, regulations, 1268; medical subordinate staff, 1191; provisions for, 1268–9; schools, state and non-state, numbers, 1268–9; technical, 1268.

Erosion, control measures, 1105.

Exports: bananas, 902; cacao, native produced, 909; cocoa, 1328; coffee, native grown, 911; groundnuts, 899; hides and skins, 941; maize, native grown, 893; millets, 894; palm oil and nuts, 914; sesame, 900.

Finance, public: loan expenditure, authorized and actual, 1452; native

Cameroons, French Mandate—Finance, public (*cont.*)

tax revenue, 1459; railways, 1591; revenue, 1452.

Forests: area, 1005; Crown land, 1007; products, rubber cultivation, 1016; reservation, government policy, 1007.

Garona school for Moslem chiefs, 1269.

Government: administrative decisions and control, 191–2, 240; agricultural advisory committee, constitution and functions, 203; chamber of commerce, constitution and functions, 204; Commissioners of the Republic, powers, 193; *conseil d'administration*, constitution, 202; native advisory councils, their constitution, 203; public health advisory committee, constitution and functions, 203.

Health and Medicine:

disease: contagious, treatment, 1176; leprosy colonies established, 1143; trypanosomiasis control measures, 1133;—and their organization, 1176; venereal, prevalence reported, 1144. dispensaries, 1176.

health services: missionary work, 1175; native subordinate staff, training, 1191; organization, staff and expenditure, 1176.

hospitals, accommodation and patients, 1176.

laboratories, *Institut d'Hygiène*, 1176.

maternity and child-welfare centres, 1176.

Judicial system, extension of *régime disciplinaire de l'indigénat*, 277.

Labour, native: communal labour, 610; compulsory labour, regulations, 614, 623; *prestation*—German use, 625;—redemption, 625;—utilization of, 625; wage-earners, numbers, 607.

LAND:

concessions: 789, 790; action at end of war, 788–9.

Crown forests, 1007.

German reservation policy, 788.

mineral rights, 1520.

native, alienation, 789.

native reserves, control, 789.

tenure: *constatation des droits fonciers des indigènes*, 860; and applications under, 861; *immatriculation* system introduced, 859; vacant lands, alienation by state, 789; white colonization and native rights, 790.

Cameroons, French Mandate (*cont.*)

Medicinal plants, 1143.
 Meteorological service, 11.
 Minerals: gold, 1504; rights, ownership, 1520.
 Mines: development, 1504; gold production, 1504-5.
 Missions: Basel, work on vernacular, 94; medical work, 1176.
 Native administration: chiefs, appointment, 487; and education, 1270; lamidos removed, 533; village councils, 490.
 Population enumeration in, 123-4.
 Railways: compulsory labour on, provisions governing, 614; development project, 1590-1; finance, 1591, 1606; German construction, 1590; lines and mileage, 1590; state ownership and management, 1591; transfer to mandatory, 1590.
 Roads, construction and mileage, 1563.
 Sanaga river region, land purchases on mainland by natives, 858.
Sociétés de prévoyance: agricultural assistance, 914; well construction by, 1052.
 Taxation:
 native direct: assessment and collection, 591-2; capitation, 591-2; cattle, 592; house, 592; revenue, 1452, 1459.
 native and non-native direct: house tax, 553; personal, 552; *prestation*, redemption, 625.
 Transport: air, expenditure, 1602; facilities inadequate, 1608.
 Vital statistics in, 124.
 Water supply, well construction, 1052.
 Yaounde: court ruling on individual property in land, 858; education of chiefs at, 1269.
 Canada, trade agreement with Union of S. Africa, 1343.
 Cape Province, *see under* Union of S. Africa.
 CAPITAL: British, preponderant part, 1354; dividends, 1323; expenditure, developmental, loans for and security question, 1356-7; foreign—diamond industry, 1311;—future opportunities, 1355;—part taken in Africa, 1354; goods, export by mother country, effect on trade relations, 1347; grants, Colonial Development Fund (British), 1320-1; grants-in-aid, British system, 1320; investment, amount per head, 1315-19;

—comparison with British, 1322-3;—foreign, 317-18;—speculative nature, 1354;—summary and conclusions, 1656-7; loans—British system, 1320;—government, interest and amount, British, 1323-4; private listed, allocation in British areas, 1321-2; problems created by introduction of, 1359; public listed—allocation in British areas, 1321;—forms of British areas, 1320;—territorial share of total analysed, 1319-20; public works and supply of, 1314; supply to native agriculture, problem, 1428-9.
 Capitalism: capitalist enterprise, effect on natives, 699.
 Carde, M., Governor-General: education policy, 1263; reforms in administrative service introduced, 237.
 Cardinall, A. W.: Gold Coast census results, studies by, 119; national income estimated, 1400.
 Carnegie Corporation: Bantu Educational Kinema Experiment financed, 1302-3; grants—libraries in Africa, 1292-3;—native education, 1252;—native libraries, 1294;—simplified English research, 1293;—study grants for British officials, 54; Jeanes school for girls, N. Rhodesia, subsidized, 1256; libraries in Africa, memoranda on, 1292; 'poor white' problem in S. Africa, report, 1364, 1377.
 Carr, H., appointment as Resident of Colony of Lagos, 259.
 Carr-Saunders, Prof. A. M., population data considered by, 124.
 Carter, Sir W. M.: Chairman of Kenya Land Commission, 749; land tenure, native customs inquiry in Uganda, 839.
 Casamance river, navigation and transport, 1545.
 Castellani, Sir A., trypanosomiasis research, 1130.
 Cattle, *see under* Agriculture, livestock.
 Census: administrative necessity of, 103; Belgian Congo, 120; Cameroons, Fr. Mand., 123-4; Dutch policy, 110; Gambia, 120; Gold Coast, 118-19;—(1931), commentary on land tenure, 840; Governors' Conference (1929), discussion, 116; importance in Africa, 1639; interval between taking, 126; Kenya, position as to, 115; Lagos (Nigeria), 117, 118; Nigeria, 117-18;

Census (cont.)

—1931 results, 118; non-native in Kenya, Tanganyika, Uganda, 117; N. Rhodesia, 112; Nyasaland, 112-13; procedure lacking in uniformity, 126; Sierra Leone, 119, 120; S. Rhodesia, 112; Tanganyika, 113-14; taxation assessment, Fr. W. Africa, 590; Uganda, 116-17; Union of S. Africa, 110.

Central Africa: missionary medical work, 1119; northern belt, leprosy prevalent, 1140; plague carried by house rats, 1134; tsetse fly distributed throughout, 1129.

Cetwayo: banishment, 358; restoration (1882), 358.

Ceylon: co-operation, Tanganyika officer deputed to study, 1472; erosion in, 1071;—control measures, 1092; labour recruitment for plantations, 651; rice from, tested Sierra Leone, 951.

Chad, swamp of, 3.

Chaga language, dialects of, 88.

Chaga people: cultivation methods, terracing, 1472; irrigation system, 1044; land tenure customs, studies of, 838; land tenure systems in Tanganyika, 831, 832, 835; land tenure transfers registered, 848; political organization centralized, 24; political struggles in Tanganyika, 23; Vihamba lands, enclosure of, 848.

Chaka: depredations of, 2; life of, 83; military organization of Zulu under, 23; revolt against, 22.

Chalmers, Sir D., opinion on Gold Coast administration, 480.

Chamberlain, Rt. Hon. J.: Bechuana chiefs' deputation to, 406; deputation on medical services in W. Africa received by, 1120; medical (colonial) study, aid, 1617.

Chambers, Sir D., Sierra Leone house tax investigated by, 287-8.

Charte Coloniale, see under Belgium.

Chartered Company of Nyasaland, 1313.

Chaulmoogra oil: leprosy treated with, 1141; plants with similar properties, Fr. W. Africa, 1143.

de Chavonnes, Dominique, and slavery in Union of S. Africa, 637.

Chewa language, 86.

China: erosion control, 1064; erosion in, 1071-2; Yellow river soil carried by, 1059.

Chinese labour imported into Union of S. Africa, 638.

Chipp, Dr. T. F., forest ecology of Gold Coast, 1011.

Chitemene cultivation, see under Agriculture, native.

Churchill, Rt. Hon. W. S., compulsory native labour, policy defined in dispatch, 616.

CINEMA:

Bantu Educational Kinema Experiment: African film production scheme, 1303; grant, Tanganyika, 1448; formation of unit, 1302-3; report, recommendations, 1303.

British Social Hygiene Council, educational film library, 1199.

educational use: Fr. W. Africa, 1305; Nigeria, 1302; Union of S. Africa, 1303.

European, effect on Africans, problems, 1300; films for Africans, difficulties of obtaining, 1301-2; health propaganda by, 1199; influence of, 1292; Union of S. Africa, 1300.

Ciskei, see under Union of S. Africa.

Clark, Sir J., malaria report by Livingstone sent to, 1116.

Clay, Prof. H., industrial relations investigations in S. Rhodesia, 689-90.

Clifford, Sir H., peasant agricultural production, support for system, 982.

CLIMATE: 11-15; cyclical changes, 14; effect on Europeans in tropics, research, 1613; effect on health, 17; evaporation and rainfall, 17; Gulf of Guinea, 12; Saharan, 12; S. African, 13; S. Rhodesia, type, 1380; sunspot cycle, 13-14; Union of S. Africa, Cape Province, 13.

Clozel, F., land tenure of Agni discussed, 840.

Cluver, Dr. E. A., account of typhus in Union of S. Africa, 1137.

Cobham, Sir A., air service work, Africa, 1597.

Colonial Council for Great Britain proposed, see under Great Britain, Colonial Office.

Colonial Office, British, see under Great Britain.

Colonial Year Books, population records in, 110.

Colonies, economic advantages ensuing from possession, discussion, 1346-8.

Colonization, coast settlements, early history, 1310.
 'Coloured People', *see under* Union of S. Africa.
 Communications, *see under* Transport and Communications.
Compagnie Aérienne Française, survey of Belgian Congo, 11.
Compagnie des Messageries Africaines, Senegal river service, 1545.
 Companies: dividends, 1323; economic exploitation by, 1312-13.
Comparative Study of the Bantu and Semi-Bantu Languages, by Sir H. H. Johnston, 74.
 Concessions: policy regarding, 1314-15; *see also under* territories.
 Congo: Bantu in, 22; basin, 3; elevation and relief of, 3; languages, 90; matrilineal tribes, initiation ceremonies, 24; rainfall, 12.
 Congo, Belgian publication, 209, 1633.
 Congo Basin Treaties: preferential tariff precluded by, 1341, 1392; proposed denunciation, 1342-3; provisions, 1341-3.
 Congo Colony, *see under* Belgian Congo.
 Congo Free State: annexation by Belgium, 140; *Compagnie du Congo pour le Commerce et l'Industrie*, 1313; concessions—Bus-Bloc area, 791;—policy, 790-2; education, native, early history, 1272; exports, rubber, 1016; government under Leopold II, 143; labour conditions, 644;—and *prestation* system, 625; land—Commission of Inquiry (1904) and legislative reform, 791;—native rights, expropriation, 791; missions, denominational discrimination, 1269-70; railways, labour imported for construction, 613; sleeping-sickness, commission (1906), 1120; taxation under, 593.
 Congo river: fleets maintained, 1548; free navigation, Berlin Act, 1341, 1548; navigation and transport, 1547-8.
 Consolidated African Selection Trust: mining in Br. W. Africa, 1514; wireless agreement with Gold Coast Government, 1299.
 Cook, Sir A. and Lady, medical missionary work in Uganda, 1119, 1167.
 Co-operation:
 administrations attitude, 1467.
 agriculture, European, 1467-71.
 agricultural production and: 1404; and marketing, 982-3.

Co-operation (*cont.*)
 cacao fermentation in Nigeria, 907.
 considerations governing, 1405.
 European: in Belgian Congo, 1480; in Cameroons, Fr. Mand., 1479; in Kenya, 1469; in N. Rhodesia, 1469; in S. Rhodesia, 1469; in Tanganyika, 1470.
 governments and natives, examples, 1404-5.
 Kilimanjaro Native Co-operative Union, coffee growers organized in, 910.
 marketing: agricultural produce in Cameroons, Br. Mand., 907; and Tanganyika, 910; Tobacco Society in Tanganyika, 916.
 native: Belgian Congo, 1480; British dependencies, 1471; credit and marketing societies, borrowing powers, limitation recommended, 1481; French dependencies, 1477-80; native authorities' attitude to, 1482-3; objects and value, 1482-3; societies, management question, 1481-2;—and official supervision, 1482; Union of S. Africa, 1468, 1470-1.
 organization, summary and conclusions, 1660.
 Sociétés de prévoyance: agricultural assistance in Cameroons and Togo, Fr. Mand., 1914; and production and marketing, 982-3.
 societies, possibilities in Africa, 1466-7.
 de Coppet, Governor-General M., *prestation*, replacement by voluntary paid labour announcement, 626.
 Copts, racial classification of, 19.
 Corporal punishment, *see under* territories, corporal punishment, and judicial system.
 Crazzolaro, Father J. P., language studies, 74.
Croix Rouge du Congo, *see under* Belgian Congo, health services.
 Crops, *see under* Agriculture.
 Cross river, transport system, 1544-5.
Cueillette, concessionary exploitation method, 643.
 Culwick, A. T. and Mrs. G. M.: land tenure customs of Ubena, study of, 838; population survey by, 128.
 Cummins, Prof. S. Lyle, tuberculosis investigation, 1139.
 Currency: livestock as, attempts to find substitutes, 1069; native use of, 1417.

Cust, R. N., classification of languages, 74.

Customs, inter-territorial agreements, 1392; *see also under territories*.

Customs Relating to the Tenure of Land, Gold Coast Report (1895), 840.

D

Dagomba language, 94.

Dairying, *see under* Agriculture, livestock.

Danquah, J. R., land tenure, native custom, judicial decisions in Gold Coast, 840.

Davis, Dr., plague research, 1136.

Davy, J. Burt, and Bolton, J. R., Uganda forestry check-list, 1010.

Davy, J. Burt, and Hoyle, F., Nyasaland forestry check-list compiled, 1010.

Death-rate, labour migration and effect on, 705.

Debt, *see under* Finance, public.

Delafosse, M.: classification of languages, 72, 76; land tenure, native, memorandum, 840.

Delafosse, M., and Villamure, M., land tenure of Agni described by, 840.

Delamere, Lord: Convention of Associations founded by, 166; deputation on Indian franchise led by, 165; estate in Kenya, 820; self-government campaign for Kenya, 167.

Delevoy, M., ecological studies of forests, 1012.

Denmark, Berlin Act signatory, 1341.

Dennis, Archdeacon, translation of the Bible into 'Union Ibo', 91-2.

Derby, Lord, defines limit of sovereignty over Bechuanaland, 404.

Desiccation: progressive, in E. Africa, 14; *see also* Erosion; Water Supply.

Deutsche Ostafrikanische Gesellschaft: foundation, 1389; powers, 1313.

Diagne, B., Deputy for Senegal, 196.

Die Pangwe, study by Tessmann, 840.

Diets, *see* Nutrition.

Dikwa people, land tenure systems in Br. Cameroons, 832.

Dinka language, 77.

Diré Company, *see* French West Africa, *Compagnie de Culture Cotonnière*.

Direct rule: expression of political philosophy, 528-9; significance of term, 527.

Direct and indirect rule, controversy on merits, 527; *see also* Indirect Rule.

Diseases, *see under* Health and Medicine.

District Note Books, need for supplementing, 1615; *see also under* British Dependencies, records.

Dixey, Dr. F.: author of *Handbook of Water Supply* (Nyasaland), 1041; Nyasaland population survey, 113.

Djula language, 95.

Docemo, King, land concessions, 768.

Doke, Dr. C. M.: author of *Bantu Linguistic Terminology*, 100; Bushman dialects studied, 75; linguistic classification, 82;—survey in S. Africa, 81;—and work, 72; Prof. of Bantu, Johannesburg University, 73; recommendations on language in S. Rhodesia, 85; work on native vernaculars, 83.

Dorobo people, land transactions with Kiambu Kikuyu, 849.

Drakensberg, escarpment of, 4.

Driberg, J. H., land tenure customs of Lango, study of, 839.

'Dual Policy', *see under* Great Britain, colonial policy.

Duala language, 97.

Duchesne, M., land tenure, native, on palm groves, studied, 841.

Duke, Dr. H. L.: trypanosomiasis, protection by injections, 1133; trypanosomiasis research, 1130.

Dundas, Hon. C., land tenure customs of Bantu in Kenya and Tanganyika, study on, 838.

Durham, Lord, land question, importance stressed, 712.

Dyerma language, 95.

E

East, R. M., publications in Hausa, 93.

East Africa: Arab immigration, 317; desiccation in, 14; diseases—helminth infection, extent, 1146-8;—plague, endemic areas, 1135;—relapsing fever, types, 1196;—syphilis prevalent, 1143;—typhus, prevalence possible, 1137; joint investigation on diet planned, 58; medical missionary work, 1116, 1117, 1119; non-tribal natives in, 496; population map of, 115; rainfall, 13; tsetse-fly areas, 1129.

East African Agricultural Journal, edited by Director, East African Agricultural Research Station, Amani, 958.

East African Medical Journal, 1161.

East African Agricultural Research Station, *see* British East Africa, Amani.

East Indies, erosion control, 1064.
 East Malling Research Station, *see under*
 Great Britain.
 Eboué, M., linguistic scholar, 77.
École Coloniale, *see École Nationale de la*
France d'Outremer.
École Nationale de la France d'Outremer,
 study of languages, 72; *see also under*
 France, colonial service (training).
École Nationale des Langues Orientales
Vivantes, languages studied, 72.
 Eco-climate, study of, 16-17.
 Ecological surveys, *see under* Survey.

Economic Development.

Berlin Conference and European terri-
 torial claims, 1310-11.

CAPITAL:

British, preponderant part, 354; divi-
 dends, 1323; foreign, part taken, 1354;
 foreign investment, 1317-18;—amount
 per head, 1318-19;—and future oppor-
 tunities for, 1355; investment, specu-
 lative nature, 1354; private listed,
 allocation in British areas, 1321-2;
 public listed, British areas, 1320, 1321;
 and share of total analysed, 1319-20.

Coastal exploration and settlement,
 1309-10.

Communications, need for develop-
 ment, 1314; *see also under* Transport.

Company exploitation, early history,
 1312-13.

Concessions: changes in policy, 1314-
 15; French policy, 1313.

DEBT: Africa's foreign, summary and
 conclusions, 1657; charges, 1355-6;
 government, interest and amount of
 British, 1323-4.

Diamonds: discovered, 1311; influence,
 1311-12.

Early difficulties, 1311.

Early penetration, 1309-10.

East Indian route, influence on, 1309-
 10.

EUROPEAN: acquisitions in Africa, 1310;
 effect on primitive systems, 1359-60.

External aspects, summary and con-
 clusions, 1656-7.

Financial assistance from colonial
 powers, 1357-8.

Gold, influence on, 1312.

Grants, Colonial Development Fund
 (British), 1320-1.

Grants-in-aid, British Government, 1320.

Economic Development (*cont.*)

Internal aspects, summary and con-
 clusions, 1657-9.

LOANS: British Government, 1320;
 examination recommended, 1358;
 government, interest rates, British,
 1323-4; interest free, suggestion
 made, 1358.

Mines, capital invested, 1321-2.

Mining influence on, 1534.

NATIVE: acquisition of technique—
 handicrafts, 1426-7;—industrial, 1428;
 capital and credit, problem of
 supply, 1428-31; co-operation, possi-
 bilities, 1466-7; evolution, need for
 control, 1431; handicrafts, special
 character, 1426-7; incentive to activ-
 ity, relation to law of property, 1430-
 1; law, African customary, changes
 in required, 1429-30; law of contract,
 need for, 1431; obstacles to, 1426-32;
 production, means of improving,
 1403-4; social customs, modifications,
 summary and conclusions, 1659;
 transport, road network, importance
 for, 1610.

Natural resources determining factor,
 1315; exhaustion, 1313-14.

Penetration by explorers, 1310.

Problems of transition stages, 1359-60.

PRODUCTION: concentration on one
 article, disadvantages, 1327-8;
 minerals, share of total, 1326; parti-
 cipation in, summary and conclusions,
 1656-7; primary, African share,
 comparative study, 1325; primary,
 share, 1327; raw materials, share of
 total, 1326-7.

Protection, policy, 1459-60.

Public services, loan expenditure, 1356.

Railways: finance, 1314-15; impor-
 tance, 1316.

Revenue Reserve Fund, development
 measures financed from, 1356.

Slave trade, its influence on, 1309.

S. and E. Africa, common interests and
 development, 1392.

S. African penetration, 1309-10.

Statistical Departments, provision of,
 lacking, 1352-3.

Statistics, unreliability, 1353-4.

TRADE: African share, 1324-5, 1327;
 balance, adverse, 1352; calculation,
 1348-9, 1350-1; export—importance,
 1327;—world decline in values, 1328.

Economic Groups.

Br. W. Africa: 1399; exports, value per head of population, comparative, 1399-1400.

S. and E. Africa: 1392; native employees, 1393; native labour supply question, 1394; natives dependent on, 1393-4.

Territories comprising, 1392, 1396.

W. Africa and Congo, 1396.

Economic Systems.

EUROPEAN: agriculture, maintenance question, 1394-6; native absorption, 1394; S. Rhodesia, 1379-85; summary and conclusions, 1657-8; Union of S. Africa and High Commission Territories, 1361-79.

markets, internal, need for, 1662.

NATIVE: agricultural character, 1416; agricultural produce, marketing control, Br. E. Africa, 1421-2; currency, use of, 1417; improvement, conditions requisite, 1416-17; manufactures, question of stimulating, 1416-17; marketing, 1417; markets, uses, 1421; summary and conclusions, 1658-9; trade—Carter system, 1421;—investigation needed, 1417; transport facilities, improvement needed, 1417; Union of S. Africa, 1405-16.

types analysed, 1360.

Economist, capital issues published in, 1317.

Education.

Advisory Committee, British, 1627.

COLOURED: S.W. Africa, 1216; S. Rhodesia, schools and government expenditure, 1226; Union of S. Africa, 1213.

EUROPEAN: Belgian Congo, 1273; British dependencies, 1259-60; Hadow Report on Education of the Adolescent, recommendations adopted in S. Rhodesia, 1226; libraries, 1292-3; Portuguese colonies, 1277-8; S.W. Africa, 1216; S. Rhodesia, 1224-6; Union of S. Africa, 1209-13.

Expenditure, *table facing p.* 1308.

Indian, 1213, 1260.

NATIVE:

adult: British dependencies, 1233; Jeanes schools, 1228.

Education—Native (*cont.*)

African literature, 69.

agricultural: anti-erosion in Tanganyika, 1092; demonstrators trained, Union of S. Africa, 1222; Fort Hare, Union of S. Africa, 1818; Fr. W. Africa, 1264; livestock management, as anti-erosion measure, 1069-70.

art, instruction in crafts, 1290-1.

'association' ideal, French policy, 1282.

Belgian Congo: 1269-75; industrial employees, 524; mission work, 142; policy, 1282-3.

books: European demand, 1293-4; and provision, 1294-5.

broadcasting: health propaganda use, 1199; uses for, 1291-2; value as medium, 1297, 1300.

British dependencies, 1229-67; administration, 1233-5; policy defined, 1229, 1231; policy and development reviewed, 1283-5.

character and aims reviewed, 1278-80.

chiefs' schools, 1256-7.

chiefs in S. Rhodesia, 381.

cinema: Bantu Educational Kinema Experiment, 1302-3; film supply, recommendations, Colonial Films Committee, 1301; health propaganda use, 1199; influence of, 1292. Commission on Higher Education in East Africa, recommendations, 1232-3.

content and aims, British policy, 1278-79, 1280-2.

customary, principles of, 1207.

divergent theories of, 1219-20.

Europeanizing tendency in early period, 1278-80.

examinations, system in British dependencies, 1253-4.

fees: policy in British areas, 1287; in French dependencies, 1286-7.

female: British dependencies, policy, 1229, 1231, 1233; educational standard of, recommendations for improving, 1193; facilities in British dependencies, 1255-6.

Fr. Cameroons, 1268-9.

French policy, 1282.

Fr. W. Africa, 1261-8.

Gold Coast, Achimota College, *see under* Gold Coast, education, native.

health and hygiene, inclusion in curriculum, 1198.

Education—Native (*cont.*)

health assistants, reduction of helminth infection through, 1148.

higher: British policy, 1231-3, 1287-90; need for greater facilities, 1231-2; provision in British dependencies, 1248-50; scope, French policy, 1288; Union of S. Africa, 1217-18.

Inter-territorial Conference, two Rhodesias and Nyasaland, 86.

Jeanes schools: chiefs' courses, influence on hygiene, 1163; policy and arms, 1228; S. Rhodesia, 1228-9; system, adoption in Union of S. Africa recommended, 1222.

LANGUAGE: affected by, 97; British policy regarding, 1230; difficulties in deciding policy, 1285-6; English, teaching medium, 1230; medium, problem in British dependencies, 1257-9; research needed, 1612; summary and conclusions, 1639; Tanganyika language policy, 87-8; Uganda language policy, 88; vernacular, medium, 68.

library provision, 1294.

medical: British policy, 1182; Dakar *École de Médecine*, 1121, 1183; French policy, 1182; Léopoldville medical school, 1183; medical assistants—Belgian Congo, 1186;—Br. E. Africa, 1184-5;—Dakar, 1185-6;—South African Native College, 1183;—Union of S. Africa, 1183;—Yaba Medical School, 1184; Mulago Medical School, 1160, 1183; subordinate staff—lack of uniformity, 1186-7;—provision in Cameroons, Fr. Mand., 1191;—in Belgian Congo, 1192;—in Fr. Equatorial Africa, 1192;—in Fr. W. Africa, 1191;—in Gold Coast, 1190-1;—in High Commission Territories, 1187;—in Kenya, 1189-90;—in Nigeria, 1190; in N. Rhodesia, 1188;—in Nyasaland, 1188;—in Ruanda-Urundi, 1192;—in Sierra Leone, 1191;—in S. Rhodesia, 1188;—in Tanganyika, 1188-9;—in Uganda, 1190;—in Union of S. Africa, 1187; Yaba College, 1183.

missions: medical training, 1187; participation in, 1207; schools, British Government policy regarding, 1229-30.

Education—Native (*cont.*)

music, instruction in, 1291.

Natal, Native Education Department and Zulu dictionary, 82.

native authorities, training in Nyasaland, 1257.

native support and financial assistance, 1239-41.

N. Rhodesia: copper-mine area, 675; vernacular text books, 86.

Nyasaland Education Dept., vernacular, 87.

Nyasaland, official language, 87.

organization, importance of vital statistics, 1639.

policy: control by administration, extent, 1207; influenced by political objectives, 1207; summary and conclusions, 1655-6.

Portuguese colonies, 96, 1277-8, 1283.

press, uses in, 1291-2.

primary: British dependencies, 1233; 'literary' element considered, 1284; scope and content considered, 1284-5; scope and period in British areas, 1242.

problems peculiar to, 1207-8.

pupils in school years, *table p.* 1309.

Ruanda-Urundi, 1275-6.

SCHOOLS: denominational question, 1235-6; missionary, 1235-9;—'bush schools' teaching given, 1242;—pioneer work, 1235;—technical and craft training, 1246; technical, definition and functions, 1245-6; 'trade', definition and functions, 1245-6.

secondary: British dependencies, 1233, 1242-3; confusion with primary, 1242; Higher Education Commission's report on facilities, 1242-3.

S.W. Africa, 1216.

S. Rhodesia: 1226-9; Dept. of Native Education and native language, 85. suitability to native conditions, British policy, 1280-1.

teachers: Higher Education Commission's recommendations, 1252; Jeanes schools for training, 1252; native, salaries, 1242; salaries, 1252; training facilities in territories, 1250-3; women, training facilities in British dependencies, 1251-2.

technical: extension of, 696-7; handicraft difficulties, 1426-7; industrial employment, possibilities, 1427-8.

Education—Native (*cont.*)

Togoland, Fr. Mand., 1267.

types, controversy over, 1207.

Union of S. Africa: 1213-29; Inter-departmental Committee on Native Education and vernacular literature, 84; Native Education Fund, 84.

vocational: agriculture departments appointments, training, 964-8; Jeanes schools, 1248; period for commencing, 1243; post-primary provision, disadvantages, 1243-4; training in British dependencies, 1281.

Table XI, explanatory information, 1304-7.

Tax: special levy (1927), Kenya, 551; Tanganyika, 550.

Efe language, 77.

Efik language orthography, 91.

Efik-Ibibio language, 91.

Egba people: land tenure proposals by Native Council, 854; land, transfers of town, 854.

Egypt: irrigation area, 1025; meteorological service in, 15.

Eire, trade agreement, Union of S. Africa, 1343.

Elgin, Lord: announces restrictions on Asiatic land tenure in Kenya, 336; policy on Indians in Kenya confirmed, 337-8.

Eliot, Sir C., Kenya colonization policy, 743.

Empire Cotton Growing Corporation, *see* under Great Britain and Agriculture, research.

English. language, use in education, Union of S. Africa, 1212.

Epidemiological Record, League of Nations publication, 1153.

Epidemiological Reports, League of Nations publication, 1153.

Erosion.

Basutoland, serious position, 1038.

bush-burning for tsetse eradication, and, 1101.

causes, in Africa, 1056-7, 1077-9.

Colonial Development Fund grants: 1038, 1098, 1113; and loans, 1084, 1098-9.

CONTROL MEASURES: 1109; Ceylon, 1072; co-ordination advocated, 1108-9; cover crops, 1065; dams as agency for, 1034; financial question,

Erosion—control measures (*cont.*)

1109; forests as agents for, 984; increasing humus content of soil, 1065-6; India, 1072; inter-departmental co-operation advocated, 1112-13; introduction of drought resistant plants, 1068; Japan, 1073; mixed farming, 1065-6; mulching, 910; native co-operation, 1109-10; overstocking problem, 1111; paddocking cattle, 1067; pastoral land—fires, control, 1067;—grass improvement, 1068;—livestock reduction, 1068-71;—reconditioning methods, 1068;—rotational grazing, 1066-7;—tree planting, 1068; propaganda among natives, 1110-11; reafforestation, 1063-4, 1112; strip cropping, 1065; terracing, 1064-5; water-supply protection, 1112.

decline of civilizations through, 1071.
exotic tree planting in relation to, 1013.

extent and control: in Basutoland, 1084-5; Belgian Congo, 1106; Fr. Cameroons, 1105; French dependencies, 1105-6; Gold Coast, 1102-3; Kenya, 1093-9; Nigeria, 1103-5; N. Rhodesia, 1087-9; Nyasaland, 1090; Portuguese colonies, 1106; Ruanda-Urundi, 1106; Sierra Leone, 1101-2; S. Rhodesia, 1085-7; Swaziland, 1085; Tanganyika, 1092-3; Transkei, 1083; Uganda, 1099-1101; Union of S. Africa, 1079-84; Zululand, 1083-4.

extent of problem, 1107-8.

flooding and, 1062.

gully, causes and effects, 1058.

human and natural elements in, 1106-7.

native cultivation, and prevention, 881.

native reserves; central measures in Union, 1083-4.

pamphlet, Belgian publication, 1106.

pastoral land, causes, 1066.

pasture control as preventive measure, 971-2.

river, Zambesi river as agent of, theories, 1035-6.

sheet, causes and effects, 1057.

shifting cultivation and, 885.

significance of term, 1106-7.

summary and conclusions, 1653.

Erosion (*cont.*)

- survey of soil conditions advocated, 1107.
- types, 1057-9.
- water, causes and effects, 1057.
- wind, causes and effects, 1058-9.
- world problems of, 1071-7.

États de population, population estimates in, 122.

Ewe language, 76, 94.

Ewe-Akan language, 76.

Exforka, *see under* Belgian Congo, industrial concerns.

Exploitation Forestière au Kasai, *see under* Belgian Congo, industrial concerns.

Exports.

- Belgian Congo, destination, 1331-2.
- bullion: destination, 1329;—from Tanganyika, 1330;—Union of S. Africa, 1229.
- cocoa, destination, 1332.
- copper: from Belgian Congo, 1329; destination, 1332; N. Rhodesia to Germany, 1330.
- cotton, destination, 1332.
- destination: British dependencies, 1329-31; French dependencies, 1331; methods of ascertaining, 1329.
- diamonds, S. Africa, 1311.
- groundnuts, destination, 1332.
- palm kernels, destination, 1332.
- palm oil, destination, 1332.
- Portuguese colonies, destination, 1332.
- sisal, destination, 1332.
- zinc, N. Rhodesia to Germany, 1330.

F

Faidherbe, General: educational policy, 1260; chiefs' schools, 1265.

Falémé river, navigation and transport, 1545.

Fante language, 76.

Fantham, Dr., trypanosomiasis research, 1130.

Farming in S. Africa, published by Agricultural Department, Union of S. Africa, 958.

Fazan, S. H., Kenya population records studied, 115-16.

Federated Malay States, native administration, comparative study, 415.

Feetham, Mr. Justice, chairman of Transvaal Asiatic Land Tenure Act Commission, 330.

Finance, Public.

- administrative services and, 1464-5.
- budgetary problem, 1432.
- customs duties, policy and uses, 1460.
- customs and excise, revenue derived, 1459.

Customs revenue, fluctuations, 1357.

debt, government, interest and amount, British, 1323-4.

expenditure: 'developmental', significance of term, 1424; 'overhead', relation to developmental, 1432; 'unproductive' loans, security question, 1356-7.

income tax, value of, 1463.

licences as revenue source, 1461.

loans: examination of position recommended, 1358; government, interest rates, 1323-4; interest free, suggestion, 1358; policy and uses reviewed, 1460-1; security for, on unproductive expenditure, 1356-7.

protection policy, 1459-60.

racial contributions, assessment difficulties, 1456-9.

social services and expenditure, 1464-5.

taxation: considerations governing incidence, 1463-4; non-native direct, revenue derived from, proportion, 1459; revenue, increase considered, 1462-3.

Fomulac, *see under* Belgian Congo.

Fondation Médicale de l'Université de Louvain, *see under* Belgian Congo, *Fomulac*.

Fondation Reine Élisabeth pour l'Assistance Médicale aux Indigènes, *see under* Belgian Congo, *Foréami*.

Forced Labour Convention, *see under* Labour.

Forde, C. Daryll, land tenure of Yakô studied, 840.

Foréami, *see under* Belgian Congo.

Forests.

administration, co-ordination, 1611.

Anglo-French Commission (Niger-Nigeria border), findings and recommendations, 1104.

area, conditions and work—in Belgian Congo, 1007-8;—in French dependencies, 1004-7;—in Gold Coast, 1002-3;—in Kenya, 997-8;—in Nigeria, 999-1002;—in Nyasaland, 994-5;—in Sierra Leone, 1003-4;—in S. Rhodesia, 990-1;—in Tangan-

Forests—area, conditions and work (*cont.*)
yika, 995-7;—in Uganda, 998-9;—in Union of S. Africa, 987-90.
area, proportionate, in Africa, 1064.
bamboo, commercial use, 1016.
botany and stocktaking: Belgian Congo, 1012; check-lists by Imperial Forestry Institute, 1010; S. Rhodesia, 1010; studies—British dependencies, 1010-11;—French dependencies, 1011; Union of S. Africa, 1010.
burning for cultivation purposes, 879; and for honey collecting, 891.
bush, ecological type, 1056.
Central African area: diminution, 984-5; and special problems, 992.
Colonial Forest Resources Development Department, 1627.
conifers, commercial possibilities, 1017.
CONSERVATION: difficulties, 992; native communal ownership of trees, 992; necessity, 984; summary and conclusions, 1052; survey needed, 992.
DEFORESTATION: causes, 985; and floods, 1062; Gold Coast, 1102-3; N. Rhodesia, 1088; Nyasaland, 1089; population increase and, 1024; shifting cultivation, 879-80, 885; Sierra Leone, 1101-2.
ecological survey, N. Rhodesia, 1010.
economic exploitation, 985: 1313; areas and types suitable for, 984-5; Bechuanaland, 990; Belgian Congo, 1007; considerations determining type of, 1018; Fr. Cameroons, 1007; Fr. W. Africa, Ivory Coast, 1005-6; government control, 986-7; Kenya, 997; method, 1014; Nigeria, Southern, 1000; N. Rhodesia, 993-4; reserved areas for, 986-7; S. Rhodesia, 990-1; species suitable for, 1013-14; Tanganyika, 996.
elephant grass, commercial use, 1017.
Empire Forestry Conference (1920) research recommendations, 992, 1626.
erosion control by tree belts, 1068; prevention by reafforestation, 984.
exotic trees: considerations determining introduction, 1018; cultivation problems, 1012-13; Empire Forestry Conference recommendations, 1013; introduction and results, 1012-13; varieties and uses, 1012.
Forestry Schools in Great Britain, 991-2.

Forests (*cont.*)

Forestry Services: African employment and training, 1020-1; co-ordination by conferences, 1019; executive inter-territorial co-operation, suggestions, 1019-20; Inspectors General for British territories suggested, 1020; staff shortage, 1018-19; training and qualifications, British, 992; training schools—African, 1020-1;—Makerere suggestion, 1020.
governmental policies, 986-7.
Japanese, area, 1073.
loss of, in Africa, 1077.
mangrove: bark and beams trade, 1014; tan production, 1014.
pests and diseases: eucalyptus snout-beetle, control, 1017; forest pathology, research question, 1018; gall-bug, study, 1017; literature, 1017; parasitic fungi, studies, 1017-18; *Pinus insignis*, diseases studied, 1017; research work in Union, 1017.
policy in High Commission Territories, 990.
PRODUCTS: drugs, medicinal, 1014; dyes, 1014; European cultivation, 1016; fibres, 1014;—coir production, 1015;—trees supplying, 1014-15; flosses, 1014—kapok research, 1015;—seed utilization, 1015;—supply, 1015; gum arabic, 1014;—production, supply, and marketing, 1015; honey, 1014; kola nuts, 1014, 1017; oil-seeds, 1014; paper-pulp, 1014;—sources of supply, 1016-17; resins, 1014;—copals, supply and research, 1015-16; rubber, 1014;—cocoa, cultivation failure, 1016;—economic exploitation, 1313;—*Functumia elastica*, early history, 1016;—*Hevea brasiliensis*, introduced, 1016;—native cultivation, 1016; shea nuts, 1014; tans, 1014; wax, 1014.
publications suggested, 1020.
rain, ecological climax type, 1056.
reafforestation: as anti-erosion measure, 1112; erosion control by, 1063-4, 1109; *taungya* system, 1004;—in Kenya, 997;—in Nigeria, 1000.
RESEARCH: 1623; *Agence Economique*, French dependencies, 1009; Belgian Congo, advisory officer, 1009; Colonial Forest Resources Development

Forests—research (*cont.*)

- Dept. (Great Britain), 1008; *Comité National des Bois Coloniaux* (French), 1009; Empire Forestry Conferences, 1009, 1626; Forest Products Research Laboratory, Princes Risborough, 1008-9; forestry staff and development in, 1018-19; Forests Products Research Institute, Pretoria, 1009; French dependencies, government officer, 1009; Imperial Forestry Institute, Oxford, 992;—publications, 1008; Imperial Institute, Advisory Committee on Timbers, 1009; Stellenbosch University, Botanical Dept., 1009; Union of S. Africa, forest service, 1009; Witwatersrand University, Botanical Dept., 1009.
- RESERVES: administrative problems, 1023-4; area determination, 1021-2; land tenure and question of, 1022-3; native attitude, 1023-4; native cultivation and extent of, 1021-2; native lands and demarcation of, 1022-3.
- SAVANNAH: area and description, 985-6; burning, 986; ecological type, 1056; protection-cover value, 985-6; regeneration problems, 1013; shifting cultivation in areas of, 986.
- soft woods, commercial use, 1017.
- soil-fertility maintenance and, 984.
- stocktaking: British dependencies, 1010-11; S. Rhodesia, 1010; Union of S. Africa, 1010.
- silviculture: mycorrhiza, soil inoculation, 995; Nyasaland experimental work, 995; timber species, replacement problems, 1007.
- timber: export areas, 1013, 1014; marketable species, 1013-14; research for marketable species, 1013; shortage, hut burning prevented, effect on tuberculosis, 1139; trade—area suitable for exploitation, 985;—replacement question, 985.
- tree planting, near villages to reduce tsetse contact, 1131.
- wattle, tan produced from, 1014.
- Forminière*, see under Belgian Congo, industrial concerns (*Société Internationale Forestière et Minière du Congo*).
- Fort Jameson Research Station, see under Northern Rhodesia.

France.

- agriculture, research institutions, 952.
- Anglo-French Convention (1898) denunciation, 1343.
- anthropological studies, 54-5.
- Berceau africain*, work in Fr. W. Africa, 1175.
- Berlin Act signatory, 1341.
- Chamber of Deputies, 'demographic protection' of labour discussed, 644.
- Colonial Ministry, principles of education laid down, 1261.
- COLONIAL POLICY: 'assimilation' of natives, meaning of policy, 138-9; 'association', education as factor in, 1261; 'association' of native *élite*, meaning of policy, 139; compulsory agricultural production, attitude towards, 630; economic—concessions in Fr. Equatorial Africa, 139;—development by, *mise en valeur*, 139-40;—protectionist, 138; education—as factor in, 1261; government authorization required for private schools, 1261;—inspectorate system, 1261;—objectives contrasted with Belgian, 1271; *Front Populaire* government's inquiry, 140; historical development, 138-9; labour—Forced Labour Convention ratified, 629;—military conscripted labour, 626-7;—*prestation*, government's attitude, 626; land, individual tenures advocated, 859-60; military service regulations, 140; military view of colonies, 143, 627; missions—rights guaranteed by treaty, 1261;—unauthorized private schools forbidden, 1261-2; native administration, summary and conclusions, 1645; political and social objectives, summary and conclusions, 1640; public interest, 143; system of government, summary and conclusions, 1641-2.
- COLONIAL SERVICE: agricultural training, 952; anthropological studies, 55; *École Nationale des Langues Orientales Vivantes*, linguistic studies, 72; *École Nationale de la France d'Outremer*, training for colonial service, 236; *École Nationale des Eaux et Forêts de Nancy*, 1004; Forest School, Barre, 1004; inspectorate system, health services, 1172; medical training, *École*

France—Colonial Service (*cont.*)

- d'Application*, 1172; training facilities to be increased, 55.
- Colonial University projected, 55.
- colonies as source of army manpower, 143.
- Croix Rouge Française*, work in Fr. W. Africa, 1175.
- education, curriculum identical in Africa, 1262.
- finance, public: colonial expenditure, and grants, 1449.
- IMPORTS: from British African dependencies, percentage, 1330; copper, 1332; groundnuts, 1332; palm oil, 1332; total, proportion from African dependencies, 1333.
- Institut National d'Agronomie Coloniale*, colonial agricultural officers trained at, 952.
- language institutions, 71.
- Ministry of Education, principles of native education, collaboration in, 1261.
- Musée National d'Histoire Naturelle*, research on tropical agriculture, 932.
- Pasteur Institute: branches in French dependencies, 1172; research co-ordination, 1203; work in Fr. W. Africa, 1175.
- population, density, 2.
- St. Germain Treaty ratified, 1342.
- Savoy, deforestation and flooding, 1062.
- taxation, transport, road competing with rail, 1610.
- timber research, 1013.
- Franchise, native and non-native, *see under territories*.
- Franck, L., Belgian Colonial Minister: compulsory agricultural production, policy, 633; cultural future of Africans, policy, 1271; educational policy, place of religion in, 1270.
- Frankel, Prof. H. S.: capital investment—calculations, 1348;—in railways, study, 1316–17;—study, 1317, 1319; gold mines in Union of S. Africa, capital return estimate, 1489; labour migration problem, views on, 704; loans, government, interest rates, analysis, 1323; S. African economic dependence on mining, investigations, 1365.
- Frankenwald Estate Research Station, *see under Universities*, Witwatersrand.
- Free Trade, influence on colonial policy, 135; *see also territories*, colonial policy.

French Dependencies.

- Africans: employment for surveying, 10; status as citizens or subjects, 194 ff.
- AGRICULTURE: co-operation, organization, 1477; Loan Board, 1477; native compulsory cultivation, 629;—present policy, 632–3; research, long term, 952;—policies, co-ordination, 958.
- Bamako urban native quarters, 526.
- Broadcasting: 1299–1300; and Radio Club, 1300.
- Capital: foreign—investment, 1318;—amount per head, 1319; public listed, amount, 1319.
- Colonial Economic Conference (1934–5), 188.
- COLONIAL SERVICES: Africans in subordinate posts, 239; *cadre général*, liable to transfer, 238; *cadre local*, not liable to transfer, 238; colour-bar non-existent, 236–7; conditions of entry, 236; divisions of, 236; inspectorate system, 188–9; organization of, 236–7; question of continuity of service, 237–8; salaries, 237; subordinate personnel, recruitment and service, 238–9; technical and administrative—co-ordination, summary and conclusions, 1642;—employment of Africans, summary and conclusions, 1641–2; transfer of personnel, summary and conclusions, 1642.
- Concessions Committee, 188.
- Constitution: 138; *Sénatus-consulte*, 185–6.
- Co-operation, native: agricultural, 1477; compulsory, 1477; financial resources, 1479–80; legislative provisions, 1477.
- Corporal punishment, 312–13.
- Defence: colonial liability, 186; expenditure, 1449.
- Economic council (in France), composition of, 187.
- Economic development, *mise en valeur* policy, 139–40.
- EDUCATION:
 - centralization, 1261.
 - Committee, 188.
 - Decree (1922), unauthorized private schools forbidden, 1262.
 - inspectorate system, 1261.
 - native: *association* ideal governing policy, 1282; character and aims, 1282; characteristics of system, 1207; cultural agencies, 1304; early his-

French Dependencies—Education (*cont.*)
 tory, 1260-1; *élite*, creation as ideal, 1282; free, 1286-7; higher, policy determining, 1287; language policy, 1282; missions, early use made, 1260; opportunities after completion, 1287; policy, 485, 1261; policy contrasted with British, 1261; summary and conclusions, 1655-6.
 state free, 1263; and secular, 1262.
 Erosion: areas affected, 1105-6; control work, 1105-6.
 Exports: groundnuts, 1332; palm oil, 1332; percentage destination, 1331.
 Finance, public: budgetary reductions, 1450-1; budgets—colonial and metropolitan interrelation, 1449; Colonial Minister's powers over, 192; expenditure, statistics, 1453; grants, metropolitan, 1449; metropolitan expenditure on, contributions, 1449.
 Forests: 1005-7; exotic trees, introduction, 1012; forestry service—conditions, training and numbers, 1004; —Forestry Adviser, 1020; —inter-territorial co-operation, 1020; information on, 1011; policy, summary and conclusions, 1652; research work, 1009.
 GOVERNMENT: administration, present developments in, 193-4; administrative divisions, 488; African sphere in system of, 253-4; 'centralizing' tendencies in government, 193-4; Colonial Minister—advisory bodies, 187, 188; —legislative powers, 186; Colonial ministry, established, 187; colonial policy, *assimilation* theory, 195; *Conseil européen de la France d'Outremer*, constitution of, 187; Governor-General—growth of powers, 193-4; —powers of, over legislation, 192-3; legislative council—functions of, 187-8; —(in France) composition of, 187-8; —system in, 185-7; Lieutenant-Governors, powers of, 193; local government councils, 200-6; —*conseils d'administration* as, 200; —*conseils de gouvernement* as, 200; Parliament's powers over, 186; policy, future, 253-4; political and social objectives, summary and conclusions, 1640; position of Senegal, 194-200; President's legislative powers, 186; records, government officers' notebooks not kept, 49; reports—deficiency of, 189, 1615;—

French Dependencies—Government (*cont.*)
journaux officiels, 189; representation of, in Chamber and Senate, 196; systems, 185-94;—summary and conclusions, 1642.
 HEALTH AND MEDICINE:
 disease: leprosy, treatment, 1175; malaria, control measures, 1125; trypanosomiasis, control measures, 1133-4; venereal, treatment, systematic methods, 1146.
 health services, charges made, 1201; *équipes de prospection et traitement* for trypanosomiasis, 1133; inspectorate system, 1172; organization, summary and conclusions, 1654; Sleeping Sickness Mission, 1133; training, 1172.
 payment for treatment, policy adopted, 1201.
 policy: medical centres and mobile detachments, advantages, 1195; military cadre doctors, disadvantages, 1195.
 reports, 1175.
 research co-ordination through Pasteur Institute, 1203.
 Import duties, customs tariff basis, 1345.
 Imports from France, proportion, 1335.
 JUDICIAL SYSTEM: discussion, 290-1.
justice française, administration of, 290; and appeals from, 291.
justice indigène: competence of chiefs, 290; court of annulment at Dakar, composition and competence, 291; tribunals, composition and competence, 290-1; *tribunaux* of, compared with British native courts, 291.
 labour cases, special courts, 662.
 native courts: Governor-General's powers of organizing, 192; problem of supervision, policy, 305.
 native tribunals, conception and composition, 485.
 non-tribal areas, 527.
Tribunaux de deuxième degré, composition and competence, 290.
Tribunaux de premier degré, composition and competence, 290.
 LABOUR:
 communal labour, chiefs' rights commuted, 610-11.
 compulsory agricultural, present policy, 632-3.
 —compulsory labour, regulations, 622.

French Dependencies—Labour (*cont.*)

cotton plantations, recruitment for, 651.
 disputes: 662; *conseils d'arbitrage*, 662.
 hours regulations, 680.
 identification card system, 671.
 migration: control measures, 708;
 effects, 705.
 military conscription of natives, historical aspect, 626.
 native conscripts, employment, 626, 643.
 native industrial employment, 1427-8.
 offences, categories and, penalties, 661.
 policy: 691; 'auxiliaries', use of contrasted with Belgian Congo, 1274.
 portage, numbers employed in War, 1538.
prestation: abuses, 626; cash redemption, 624; compulsory service, 624; criticisms of system, 625-6; inquiry into system, 626; League of Nations' attitude, 626; liability, 624; penalties for non-compliance, 624; regulations governing, 624; system, 622.
 private employment: recruitment agencies, 655;—history, 643-4;—protective measures, 644; recruitment and official pressure, 649-50.
 safeguards: health circulars (1924), 644; local instructions for (1926), 644.
 skilled employment of natives, 692.
 supply, 693.
 tax default labour, employment of, 622.
 vagabonds, impressment as labourers, 622-3.
 wages, minimum fixed, 695.
 welfare regulations, 680.

LAND:

alienation to non-natives by private purchase, state control, 827.
 French law applied (1873), 783.
 mineral rights, 1520.
 native: expropriation, 782; mineral rights protected, 1522; ownership declaration, 782; rights, guarantee, 783-4.
 proprietary rights, government encouragement, 866.
 rights claimed by state, 823.
 state ownership of vacant, 784.
 succession, provisions governing, 866.
 tenure, 783; concessions granted from state lands, 861; Conservator of Property, functions of, 859; *constatation des droits fonciers de l'indigène*—

French Dependencies—Land (*cont.*)

applications under, 860;—process under, 860; *immatriculation*—aims of policy, 859-60;—system, 859-62, —and objections to, 861; *immatriculé*, survey of, 959; registration of titles under *immatriculation* procedure, 859; report of commission (1915), 860; native—commission on, 840;—customary, modifications, 858-62;—individual title, policy of encouraging, 859-60;—memorandum by M. Delafosse, 840;—studies, 840-1;—treatment of, 485; system, two classes of rights recognized, 858-62.

law applicable, 866.

Language in, 95.

LAW: administrative law, 276-7; African customary, recognition of, 276; character of, 275-7; citizen status, rights of, under *justice française*, 275-6; compared with Belgian, 278-9; extra-judicial punishment in, 277; non-citizen status, rights of, under *justice indigène*, 276; *ordre public* defined, 276; publication of, 280; sources of, 275.

Legislation: Governor-General's powers, 192-3; methods of legislation compared with British and Belgian, 279-80; ministerial decree method criticized, 279.

Libraries, 1293.

Mandates: land alienation to non-native under *constatation* process, 860.

Military service: conscription of natives, 140, 626; conscripts used for labour, 626, 643; native—conscripts, categories, 626;—ill health, 1121;—recruits, proposal for increase, 626.

Military view of, 143, 603.

Minerals, exploitation, native rights, 1522; and ownership, 1520.

Mines: increased development, and labour recruitment, 650; prospecting permits, system, 1527-8; regulations governing, 1527-8.

Mise en valeur policy, 139-40, 486.

NATIVE ADMINISTRATION:

administrative divisions, 488.
 advantages claimed for system, 533-4.
association principle as basis of: 484;
 its meaning and application, 484-5.
 character of, discussed, 490-1.

French Dependencies—Native Administration (*cont.*)

chiefs: appointment of traditional leaders advocated, 487; as executive agents, 486-8; duties, 488-9; employment in taxation, 599-600; position in systems, 533-4; salaries, 488; status and grades, 488.
criticisms directed against system, 534-5.

direct control introduced, 485-6.
direct rule, reasons for adoption, 533-4.
élite, formation and functions, 484.

general policy discussed, 533-5.
judicial system, *see under* French Dependencies, judicial system.

mise-en-valeur policy, its effect on, 486.

Native Affairs Commission: functions, 188; native citizens not subject to, 484.

reports on, not published, 490.
representation of native opinion, 484-5.
summary and conclusions, 1645-6.
supervision of government agents, 490-1.

traditional institutions, value assigned, 533.
urban natives, 526-7.

Native policy, committee to study native question set up, 188.

Pointe-Noire, urban native quarters, 526.

Population: classification, 107; estimates in, 122.

Press, vernacular publications, 1295.

Public Works Committee, 188.

Railways: finance, state participation, 1604; labour imported for construction, 613.

Sociétés de Prévoyance: and co-operation, 1660; financial resources, 1479-80; organization, 1477.

Subjects and citizens defined, 195.

Survey: 6; geological and mining department, 1517.

TAXATION:

native direct: 588-93; assessment and collection—defects of system, 601;—position of administrative officers, 601; incidence compared with British, 595; income tax, 552; tax defaulters, payment by labour, 622.

native and non-native direct: 552-3; income tax, 552;—town incomes scheme considered, 552; personal

French Dependencies—Taxation (*cont.*)

tax, 552; *prestation*—cash redemption, 624;—labour service, 624;—money tax proposal, 626.

Transport, air, expenditure, 1602.

Vagabonds: punishment, 661; treatment under *indigénat* regulations, 622-3.

Water supply, policy, summary and conclusions, 1653.

West Coast, land tenure, native systems on, 832.

French Equatorial Africa.

AGRICULTURE:

bank, 1480.

concessions, government policy, 981.

crops: beeswax, native production, 891; coffee, native production, 910-11, 1401; cotton, expansion through road building, 1609;—native production, 906, 1401; groundnuts, native cultivation, 898-9; palm products, native production, 914.

education, native demonstrators, Brazzaville, 1268.

government policy, 1401.

hides and skins, 941.

native: cash crops, compulsory production, policy towards, 633; 'educative' cotton growing, 906.

research, 952-3.

Bangi, commune established at, 205.

Banks, agricultural, 1480.

Berlin Act, 1341.

Brazzaville: centre of government, 191; commune established at, 206; native agricultural demonstrators trained, 1268.

Capital: investment, 1318; public listed, 1319.

Chad, administration of, 191, 241.

Citizenship, conditions for acquiring status, 200.

Civil service: African employment in, 241; deficiency of personnel, 241; frequent transfers of personnel, 238; local service, 241.

Concessions in, 139;—development by, 1313;—labour under, 643-4;—present policy, 1401;—rubber, abuses, 1016.

École Edouard Renard, prevocational medical training, native, 1192.

EDUCATION:

African: agricultural demonstrators, Brazzaville, 1268; Fr. W. African

French Equatorial Africa—Education (*cont.*)

technical schools used, 1268; language medium regulations, 1268; medical subordinate staff, 1192; missions—non-state French preponderance insisted upon, 1268;—participation in, 1268; provision for, 1267–8; schools, state and non-state, numbers and attendance, 1268.

European, 1267.

provision, 1267–8.

Erosion, 1106.

Export duties, revenue, 1452.

Exports: coffee, native grown, 911; groundnuts, 898; percentage destination, 1331; timber, 1400–1.

Finance, public: budgetary position, 1451–2; expenditure, 1452;—contribution to metropolitan outlay, 1449;—railway construction, 1589–90; loan budget, 1452;—expenditure, 1452; railway, 1590; revenue, 1452.

Forests: area, 1005; deforestation, 1106; revenue from, 1452.

Fort Lamy: advisory body established, 204; commune established at, 206.

Gabon: administration of, 191; erosion and deforestation, 1106.

Government: administration, reorganization of, 190–1, 240–1; advisory body representing agriculture, commerce, and industry created, 204; communes, composition and functions, 205–6; *conseil d'administration*, its constitution and powers, 202; federation of, 190;—constituent colonies, 190;—present development of, 193; permanent commission, its constitution, 202.

Governor-General, value of aviation stressed, 1602.

HEALTH AND MEDICINE:

disease: leprosy, village settlements, 1143; trypanosomiasis—control and treatment, 1177;—grant, 1120; yellow fever, endemic area, 1128.

health services: native subordinate staff, training, 1192; organization, staff and expenditure, 1177–8.

hospitals: patients, 1177–8; system, 1177.

missionary work, 1177.

welfare, native, railway employees, mortality, 1590.

French Equatorial Africa (*cont.*)

Import duties, revenue, 1452.

Industrial concerns: *Compagnie équatatoriale de Mines*, diamond mining, 1514; *Compagnie Forestière Sangha Oubanghi*, wild rubber concession held by, 919; *Société de Construction des Batignolles*, railway construction, 1590.

Justice indigène in, 290, *see also* under French Dependencies, judicial system.

Labour: compulsory—and concession system, 632;—railway construction, 1590;—regulations, 614, 622; hours' limitation, 680; inspectorate, 680; migration, 703; *prestation* redemption, 625; private employment, recruitment, official support, 643–4; recruitment regulations, 708.

LAND:

alienation to non-natives, terms, 826. concessions: 783; abuses, 786–7; history of policy, 786–7; policy revised, 787–8; present policy, 1401.

freehold grants, 787.

native, loss, 788.

tenure: *immatriculation* system introduced, 859; 'vacant' lands, misinterpretation by government, 837.

Languages, 77, 95.

Libreville, commune established at, 205.

Meteorological service in, 16.

Minerals, gold, 1504.

Mines: development and control, 1504;—summary and conclusions, 1660; diamond, exploitation and production, 1514; gold, production, 1504.

Missions, medical work, 1177.

Native administration, tribal reconstruction advocated, 487.

Population: 105–6; data lacking, 123; decrease, 106.

Public works, expenditure, 1452.

RAILWAYS: company construction, 1590; compulsory labour on, provisions for obtaining, 614; Congo Océan-Pointe Noire—budget, 1451;—loan expenditure on, 1452; construction, reasons and difficulties, 1589; cost of construction, 1589–90; finance, 1590, 1606; native labourers, mortality, 1590; state ownership, 1589; survey, preliminary, 1589.

French Equatorial Africa (*cont.*)

Roads: construction difficulties, 1563; influence on cotton production, 1609; inter-colonial, 1562; mileage, 1562-3. Social services, expenditure on, 1452. Survey, railway construction, 1589.

Taxation:

capitation, yield, 1452.
native direct: 590-2; assessment and collection, 591; history, 590-1; incidence, 591; rubber, 590-1.
native and non-native direct: personal, 552; urban land, 553.

Transport:

air: development 1602; expenditure, 1602; trans-African, *Air France* service, 1602.

facilities inadequate, 1608.
river system, 1547.

Ubangi-Shari: administration of, 191; agricultural policy of M. Lamblin, 632.

Water supply: irrigation investigation, 1052.

French Indo-China: labour recruitment for, 651; native administration, comparative study, 415.

French West Africa.

AGRICULTURE:

co-operation for improvement, 1478.
Crédit Agricole, irrigation loans, 1052.
crops: bananas—concession cultivation, 786;—European production, 928, 1400;—native production, 902; beeswax, native production, 891, 902; cacao, native cultivation, 908; cassava, native cultivation, 896; coconuts and copra, native production, 915; coffee—concession cultivation, 786;—European production, 1400;—native cultivation, 910; cotton—cultivation in Niger irrigated area, 1049, 1051;—native cultivation, 905-6; groundnuts—exports, 1328, 1400;—marketing, 1400;—native cultivation, 898; kola nuts, native production, 890; maize, native cultivation, 892-3; millets, native cultivation, 894; palm products—European production, 1400;—native production, 913; rice—concession cultivation, 786;—cultivation in Niger irrigated area, 1051;—native cultivation, 895;—varieties grown, 895; sesame,

French West Africa—Agriculture (*cont.*)

native cultivation, 900; shea-nuts—irrigation for cultivation, 1051-2;—native production, 890; wheat, native cultivation, 889.

education: African, 1264; native elementary schools, rural areas, 1263-4; native training, 968.

European: bananas, 919, 928; coffee, 919; kola, 919; rice, 919; sisal, 919.

livestock: cattle, French herds introduced, 931; hides and skins, 941; sheep, breeding importations, 932; stock-breeding work, 977; stock-farms—El Oualadj, 977;—Goundam, 977; wool, 941.

Loan Board, powers, 1479-80.

marketing, co-operation, 1478.

mutuelle scolaire system, 1480.

native: cash crops, compulsory production policy, 633.

research, 952; soil and fertilization experiments in Niger basin, 1051, shifting cultivation, control effects, 1105-6.

Anthropology, studies, 1614.

Bamako: leprosy research institute and settlement, 1143; orphanages for half-caste girls, 1265.

Banks, Agricultural Loan Board, 1479-80.

Capital: expenditure, developmental, 1451; investment, 1318; public listed, 1319.

Chambers of Commerce, labour recruitment policy, 643.

Chambre d'annulation at Dakar, composition and functions, 297.

Cinema, regulation and control, 1304.

Citizenship, conditions for acquiring status, 199-200.

Colonization: Goundam experiment, 1051; Niénébalé experiment, 1049; Niger basin irrigated area, 1050-1; Sotuba canal area, 1049-50.

Concessions: forest exploitation by, 1005-6; present policy, 1400.

Co-operation, native: *mutuelle scolaire*, education, 1480; policy and aims, 1478; results, 1478; well-construction, 1478.

Dahomey: administration, 190; native councils, 203; Porto Novo agricultural school, Togo section, 1267; Victor Ballot school, Togo section, 1267.

French West Africa (*cont.*)

Dakar: administration, 190; finance, 1450; Gorée included in commune, 196; medical training, 1183; native citizens in, 196; one of four communes, 194; plague infection through, 1135; *Polyclinique* (medical centre) at, 1173; secondary school at, place in system, 1267; White Fathers' Mission School, 1264; William Ponty School at, 1264.

École de Médecine de l'A.O.F., native training, 1185-6, 1191.

École William Ponty, native education at, 1186, 1264.

Economic development in: 139; communications necessary for, 1400; European, future of, conclusions, 1658.

EDUCATION: language medium, 1262; loan expenditure on, 1451; missionary teachers, qualifications required, 1262; missions, position in, 1261; state control, 1261; state and non-state schools, comparative attendance, 1261.

EDUCATION, AFRICAN: administration and teaching school, Gorée-Dakar, position in system, 1266; adult, 1264; advanced, limitation of, reasons, 1262-3; agriculture, 1264;—elementary schools, rural, 1264;—training provision, 968; *cadres d'élite*, training courses, 1266; chiefs' schools, 1265-6; co-operation, 1480; craft schools, 1264; Dakar Medical School—achievement of, 1267;—girls at, 1265; Dakar Secondary School, girls at, 1265; *École William Ponty*, 1186; elementary schools, 1263-4; female, 1265; French language, methods of teaching, 1262-3; *grandes écoles*, 1266; half castes, 1265; high schools, 1266; higher primary schools, 1266; higher terminal school, proposal, 1266; hygiene, 1264; 'initiation' schools, 1263; *Lycée Faidherbe*, girls at, 1265; marine engineering school, 1267; medical assistants training, 1185-6; medical, Dakar *École de Médecine*, 1121, 1183, 1266; medical subordinate staff, 1191; mission schools, 1264-6; post-primary, 1266-7; regional (primary) schools, 1264; rural teachers training (normal) schools, 1264, 1266; schools, grades, 1263-4; system, objectives, 1262; trade schools, 1264; urban primary

French West Africa—Education, African (*cont.*)

schools, 1264; urban teachers training, William Ponty School, 1264; Veterinary School, Bamako, 1266; vocational, higher primary schools, purpose, 1266-7; vocational training, emphasis on, 1262.

EDUCATION, EUROPEAN: secondary schools, Africans trained at, 1267; system, curriculum, 1262.

EXPORTS: bananas, 902; beeswax, 891; cacao, native produced, 908; coffee, native grown, 910; copra, 915; gold, 1504; groundnuts, 898, 1328, 1400; hides and skins, 941; kola nuts, 890; percentage to France, 1331; sesame, 900; shea nuts and butter, 890; wool, 941.

FINANCE, PUBLIC:

budgets, federal, and local, 1450.

debt, 1449.

expenditure: 1449-50; contribution to metropolitan outlay, 1449; metropolitan, federal, and local, 1449.

loan: expenditure, authorized and actual, 1451; federal, objects, 1451.

nature tax revenue, 1459.

railways, 1589.

revenue, 1449.

system of control, 194.

FORESTS: Anglo-French Commission, desert conditions investigations, 1106;—findings and recommendations, 1104; area, 1005; economic exploitation, 985, 1005-6; forestry service, 1005; government control, 1005; investigations, 1011-12; Ivory Coast, main area of, 1005; reafforestation, policy and results, 1006; reservation policy, 1006; savannah destruction, 1105-6; village plantations, 1006.

Fort Lamy: artisan school, 1267; venereal disease, records kept, 1146.

Franchise, grant to Senegalese, 138.

Geological research service, 240.

Gorée, commune, 94, 196.

GOVERNMENT: administrative centralizing policy, 193-4;—divisions of colonies, 190;—organization and divisions, 239-40;—reorganization recommended, 240; chambers of agriculture, commerce and industry, constitution and functions in, 203-4; *conseil de gouvernement* as organ of, its constitution and powers, 200-1;

French West Africa—Government (*cont.*)
conseils d'administration, constitution and powers, 201-2; federation, 189-90;—constituent parts, 189-90;—present development, 193-4; mixed communes, composition and functions, 204-5; native advisory councils, composition and functions, 202-3; native communes, composition and functions, 205; officials, African assistant, training, 1266-7; reports, *Annuaire Statistiques*, 189.

HEALTH AND MEDICINE:

central institute for leprosy, 1143.
 diseases: leprosy—prophylactic campaign, 1143;—village settlements, 1143; trypanosomiasis, control and treatment organization, 1174-5, 1191; yellow fever—conference, 1161;—epidemics, 1127.
 dispensaries, system, 1173-4.
 doctors, native, restrictions on practice, 1186.
 health services: administrative organization, 1173-4; *Berceau africain*, 1175; *Croix Rouge française*, 1175; loan expenditure on, 1451; native auxiliaries, employment, 1183; native medical assistants, training, 1183, 1185-6; native subordinate staff, training, 1191; organization, 1172; *Polyclinique*, 1173; sanitary work, 1174; staff, European and African, 1172-3; trypanosomiasis organization, 1174-5.
 hospitals: accommodation and patients, 1175; organization, 1173; system, 1174.
 hygiene, education in, 1264.
 infant welfare, 1175.
 laboratories, 1175.
 maternity centres, Dakar, 1173.
 missions, medical work, 1175.
 native training: Dakar *École de Médecine*, 1121; Ouagadougou, 1175.
 research: leprosy, 1143; and trypanosomiasis, 1175.
 Import duties, kola nuts, 890; *see also* under French Dependencies.

INDUSTRIAL CONCERNS:

Association Cotonnière Coloniale, native cotton growing assisted, 905.
Compagnie de Culture Cotonnière: concession, 906; Goundam colonization plan, 1051; labour supply, 643;

French West Africa—Industrial Concerns (*cont.*)

sheep-breeding work, 932; stock-breeding work, 977.
Compagnie des Cultures Tropicales, labour supply, 643.
Compagnie Forestière Équatoriale, forest concessions, 1005-6.
Compagnie des Mines de la Faléme, 643.
 labour recruitment for, by government, 643.
Société des Mines de Falémé-Gambia, 1504.

Judicial system: cases compared with Nigeria, 291; *Justice indigène* most developed in, 290; *Tribunaux coloniaux d'appel*, composition and competence, 290-7; *see also* under French dependencies.

LABOUR: compulsory agricultural, policy, 632; compulsory labour, regulations, 614, 622; craftsmanship, traditional, 1428; disablement compensation, 680; employees, numbers, 607; forest exploitation and demand for, 1005; hours limitation, 680; inspectorate, 680; migration, 703; military conscripts used, 643; *prestation*—period of, 625;—redemption, 625;—road-making, 1562; private employment, recruitment for, 643, 657; recruitment regulations, 708; women and children, regulations, 680; workmen's savings, 680.

LAND:

concessions: area, 786; control, 784-6; policy, 1400.
 Land Commission (1915), 785.
 ownership, state claims, 785.
 tenure: communal and French law, 785; *constatation des droits fonciers des indigènes*, process introduced, 860; immatriculation system introduced, 859; native, and agricultural improvement, 837; native customs, series of studies on, 840; rights of emirs under Moslem law, Lake Chad, 833.
 title, provisions governing, 785.
 Languages in, 95.
 Meteorological record, Dakar, 14.
 Meteorological service, 16.
 Military service, conscripts used for labour, 643.
 Minerals, gold, 1504-5.

French West Africa (*cont.*)

MINES: areas, 1504; Department, 1505; development, summary and conclusions, 1660; gold—development and policy, 1504;—native working, 1505;—production, 1504-5.

Missions, medical work, 1175.

mutuelles scolaires, education of, 1480.

NATIVE ADMINISTRATION:

chiefs: appointment in Dahomey, 487; as government employees, 487; education of, 1266-7; and taxation, 589-90; traditional only appointed, 593.

native councils, composition and functions, 489-90.

taxation, see under French West Africa, taxation (native direct).

tribal disintegration, 487.

Niger Basin Scheme: 1049-51; control and management, 1404-5; loan expenditure, 1451.

Niger Office: agricultural research station, 952;—work, 1051; organization for control of Niger Basin irrigation, 1050; survey work, 1505.

Ouagadougou: native training in trypanosomiasis work at, 1191; orphanages for half-caste girls, 1266.

Polyclinique, native medical training course, 1186, 1191.

Population density, 2.

RAILWAYS: compulsory labour on, provisions for obtaining, 614; development, 1588; finance, 1450, 1589, 1606; lines and mileage, 1588; reasons for developing, 1604; river-rail system, 1589; Trans-Saharan line project, 1588-9.

Research: geological research service, 240; central organization, 240.

ROADS: administration, 1562; Dakar-Bamako system, 1561-2; Highway Code, 1562; inter-colonial routes, 1562; motor services, 1562; *prestation* labour, 1562.

Rufisque, one of four communes, 194.

St. Louis, Lycée Faidherbe, place in educational system, 1268.

Sansanding, head-quarters of Niger Basin irrigation project, 1050.

Ségou, agricultural station, 952.

Sociétés de Prévoyance: numbers and members, 1477-8; organization, 1477; policy and work, 1477-8; produce

French West Africa—*Sociétés de Prévoyance* (*cont.*)

marketing, 1400; well construction, 1051-2.

Survey: aerial, 11; geological, 1505.

TAXATION:

native direct: 588-90; assessment and collection, 589-90; capitation, 588-9; cattle tax on pastoral nomads, 589; exemptions, 589; incidence, 589, 591; livestock (*pacage*), 589; Moslem systems, 589; *prestation*, 588-9; revenue from, 1459.

native and non-native direct: *prestation*, redemption, 625.

Trade, Agence Économique de l'A.O.F., monthly bulletin, 189.

Transport and Communications: loan expenditure on, 1451; Niger river control and development, 1547; river system, 1545-7; river-rail system, 1589; Sotuba canal, 1049-50.

Ubanghi Shari region, wild rubber concessions, 919.

Vital statistics registration system, 123.

Water supply:

administrative organization, 1048.

irrigation: Niger Basin enterprise, 1049-51; Niger Basin project, area and cost, 1050; Senegal rivers investigation, 1049-50.

Niger scheme, loan expenditure on, 1451.

wells, construction, 1051-2, 1478.

French West Africa: Provinces.**DAHOMÉY:**

agriculture, European, 919.

health services, 1173.

Ina, agricultural and veterinary station, 952.

land tenure: Islamic influence on, 832; native leasehold practices, 858.

Niaouli, agricultural station, 952.

Pobé, agricultural station, 952.

taxation: collection methods, 590; native and non-native—personal, 552;—urban land, 553.

transport and communications, river system, 1546.

GUINEA:

agriculture, European, coffee, 924.

communications, river system, 1545.

disease, relapsing fever endemic, 1136.

health services, 1173.

French West Africa: Provinces—Guinea
(*cont.*)

- Kankam, agricultural station, 952.
- Kindia: agricultural station, 952;
- Pasteur Institute laboratory, 952.
- taxation: experimental assessments, 590; native and non-native direct—house tax, 553;—personal tax, 552.

IVORY COAST:

- administration, 190.
- agriculture, European: 919; banana production, 928.
- Bingerville, agricultural station, 952.
- Bonaké, veterinary station, 952.
- diseases: leprosy, patients sent to Bama-ko, 1143; plague outbreaks, 1135.
- education, African: girls, 1266; rural teachers training-school, 1265, 1267.
- forestry undertakings, labour recruitment, 643.
- forests: 1005-6; publications, 1012.
- Gagnoa agricultural station, 952.
- health services, 1173.
- Koroko veterinary station, 952.
- La Mé agricultural station, 952.
- land tenure, native leasehold practices, 858.
- languages, 77.
- medicinal plants, 1143.
- taxation, native and non-native direct, personal, 552.
- transport and communications, river system, 1546.

MAURETANIA:

- achour* tax adopted, 589.
- administration, 190.
- Maderda veterinary station, 952.
- taxation: collection, 590; livestock (*pacage*), 589; native and non-native direct, personal, 552.
- zakkat* tax adopted, 589.

NIGER:

- administration, 190.
- deforestation and erosion, 1105-6.
- taxation: livestock, 589; native and non-native, personal, 552.

SENEGAL:

- administration, 189-90.
- agriculture: increased by railway, 1608; soil deteriorated, 1106.
- civil code for natives, 195-6.
- communes de plein exercice* in, 196-7.
- communes: 194-5; and their re-organization, 196.
- conseil colonial*: constituted, its compo-

French West Africa: Provinces—Senegal
(*cont.*)

- tion and powers, 197-8; taxation votes in, 600.
 - Conseil Général*: constituted, its powers and composition, 197; protests against *immatriculation* of land, 861.
 - conseil privé* constituted, its membership, 197.
 - free communes, their government and status, 194-200.
 - education: African, girls, 1265; policy, Moslem opposition, 1260.
 - finance, public, 1450.
 - franchise, 195.
 - health services, 1173.
 - land tenure: native customary, rental system, 858; policy, 861.
 - local self-government in, 196-7.
 - M'Bambey, agricultural station, 952.
 - native citizens of communes under French law, 198-9.
 - native citizens and subjects, 194-9.
 - native councils in, 203.
 - plague introduced from Dahar, 1135.
 - railways, groundnut cultivation extended by, 1608.
 - representation in French Chamber, 196.
 - St. Louis: chiefs' school at, 1265; commune created, 196; one of four communes, 194; training school for priests, 1260.
 - status of natives under free communes, 195-6.
 - taxation: livestock, 589; native direct, protests by *Conseil Colonial*, 589; native and non-native direct—house-tax, 552-3;—personal tax rates, 552;—urban land taxes, 553.
 - urban native areas reserved, 526.
- SUDAN:
- administration, 190.
 - agriculture, livestock, tuberculosis, 1140.
 - Bamako, veterinary research headquarters, 952.
 - cotton companies, labour recruitment, 643.
 - deforestation and erosion, 1105-6.
 - education, African: girls, 1265; rural teachers training (normal) school, 1264, 1266.
 - El-Ouladji, livestock breeding station, 952.
 - Gallikéni, General, educational policy in, 1260.

French West Africa: Provinces—Sudan
(*cont.*)

- land tenure policy, 861.
- leprosy, patients sent to Bamako, 1143.
- Nara, livestock breeding station, 952.
- native councils in, 203.
- Nioro, livestock breeding station, 952.
- Sotuba, veterinary research station, 952.
- taxation: collection, 590; livestock, 589; native and non-native—personal tax rates, 552;—urban land, 553.
- transport and communications, river system, 1545.
- urban native quarters in, 526.
- UPPER VOLTA:**
 - administrative organization, 190.
 - labour recruitment, official assistance refused, 643.
 - land tenure policy, 861.
 - taxation, native and non-native direct:
 - personal, 552; urban land, 553.
 - urban native areas reserved, 526.
- Fulani language, 92, 93, 94.
- Fulani people: cattle-breeding practised, 932; description of, 28; Lamido's position as ruler, 433; land tenure system, 853; political organization, 28; well construction in Nigeria, Northern Emirates, 1047.
- Futa Jallon Plateau: climate, 12; physical characteristics of, 3.

G

- Ga language, 94.
- Galla people, description of, 29.
- Galliéni, General: educational policy, 1260; and vocational training, 1266.
- da Gama, Vasco: Cape route to East explored, 1309; employs Indian pilot, 318.

Gambia.

AGRICULTURE:

- crops: groundnuts—exports, 1327;—native cultivation, 898; pests and disease control, 970.
- education: native training facilities, 968.
- livestock: hides and skins, 940.
- native: model gardens scheme, 968.
- Bathurst: insanitary conditions, 1170; vital statistics registration in, 120; yellow fever epidemic, 1128.

Gambia (*cont.*)

- Census in, 120.
- Co-operation, native, non-existent, 1476.
- Education, native: advisory committee, composition, 1238; agricultural training, 968; chiefs' sons, 1257; schools, chiefs' sons, Georgetown, 1257; secondary, 1242.
- Exports: groundnuts, 898, 1327; hides and skins, 940; percentage to Great Britain, 1330.
- HEALTH and MEDICINE:** Bathurst drainage scheme, 1170; child welfare centre, 1171; disease—yellow fever endemic area, 1127-8;—and Bathurst epidemic, 1128; dispensaries, 1171; health services: organization, staff and expenditure, 1170-1; hospitals, accommodation and patients, 1171; research provision, 1171;—on trypanosomiasis, 1619.
- Imports: proportion of British African, 1335; proportion of different, 1335; value per head of population, 1334.
- Judicial system: Moslem court, Bathurst, 483; native courts, constitution, jurisdiction, and appeals, 483.
- Labour, native: communal, 610; compulsory, abolition, 620; portage abolished, 629.
- Land: alienation, 780; Crown, definition, 780; native law applicable, 780; ownership, 780.
- Language in, 95.
- Legislative Council, composition, 173.
- Moslems, increase, 483.
- NATIVE ADMINISTRATION:** 482-4; chiefs, revenues, status and powers, 483; financial organization, 483; historical development, 482-3; native authorities, legislation establishing, 482-3; tribal disorganization, 482.
- Roads, 1561.
- Survey, special investigation, 1516.
- Taxation: native direct, yard residents, tax on, rate and allocation, 588.
- Transport: air, *Deutsche Luft Hansa* mail service, 1600; river, 1543.
- Gambia river, navigable limits, 1543.
- Game: destruction—effect on nutrition, 887;—to control trypanosomiasis, 1131; native food supply, 887.
- Ganda language, and orthography, 88.

- Ganda people: land tenure systems, 832;—special study made, 839; military organization, 25; political organization, 23-4.
- Gandhi, M. K.: agreement with Gen. Smuts on passive resistance, 323; concerned in demonstration at Durban, 320; leads passive resistance campaign in Transvaal, 321; leads renewed passive resistance campaign, 322-3.
- Ganges river, conservation measures, 1060.
- Gardiner, Dr. A. H., linguistic work, 102.
- Gemmell, Mr., gold-mining expansion possibilities estimate, 1374.
- German administration of S.W. Africa, 373.
- German colonies, companies, exploitation by, 1313.
- German East Africa, administrative system in, 435.
- Germans in S.W. Africa, numbers, 155.
- GERMANY:
- anthropological studies, 56.
 - Benguela-Katanga railway, participation, 1595.
 - Berlin Act, signatory, 1341.
 - convention with Great Britain on Portuguese colonies, 1595.
 - exports to British African dependencies, Ruanda-Urundi, and Tanganyika, 1338-9.
 - freehold rights granted in Tanganyika, 848.
 - imports: from British African dependencies, percentages, 1330; cocoa, 1332; copper, 1332;—direct and indirect, 1329;—from N. Rhodesia, 1330;—percentage from Africa, 1333; cotton, percentage from Africa, 1333; edible oils, percentage from Africa, 1333; manganese ores, percentage from Africa, 1333; palm kernels, 1332; palm oil, 1332; Ruanda-Urundi, 1339; sisal, 1332; Tanganyika, 1339; total, proportion from African territories, 1333; wool, percentage from Africa, 1333; zinc from N. Rhodesia, 1330.
 - languages, African: government support for studies, 1639; institutions for study of, 71.
 - schools for settlers, anthropological instruction, 56.
 - Tanganyika coffee bought at special terms, 1472-3.
- Gezira scheme, *see under* Water Supply; Anglo-Egyptian Sudan.
- Ghee, *see under* Agriculture, livestock (dairying).
- Gibb, R.: Kenya-Uganda railways inquiry, 1583; railway inquiry, Br. E. Africa, 1580.
- Gibson, B. D., and Oldham, J. H., authors of *The Remaking of Man in Africa*, quoted, 1242.
- Gill, Sir D., survey work, 7.
- Gillman, C.: population study by, 115; Tanganyika native irrigation system, investigation, 1044;—population distribution studied, 1044.
- Githaka, Kikuyu land tenure system, 849, 868.
- Gladstone, Captain T. A., London to Capetown flights, 1597.
- Glen, A., inquiry into S. Rhodesian administrative system, 223, 224.
- Glen Grey Act (1894): Ciskei provisions, 355; land tenure—individual holdings established, 867;—provisions, 843;—success attained, 844; native franchise, 150; Transkei, 352; *see also under* Union of S. Africa, Cape Province.
- Glencig, Lord: attitude to native policy in British Kaffraria, 348; land policy in Cape Colony, 718.
- Goans, classification of, 117.
- Goats, *see under* Agriculture, livestock.
- Gold Coast.
- Accra: agricultural laboratories at, 951; Colonial Asylum at, 1151; land titles registration advocated, 858; municipality constituted, 519; representation on legislative council, 172; town council, composition and competence, 523.
 - Adum Abuakwa division, land alienation to other natives practised, 828.
- AGRICULTURE:
- crops: bananas—cultivation indicates soil poverty, 1103;—native cultivation, 902; cacao and cocoa—exports, 1327-8, 1398;—export tax, 585, 1444;—forest protection for, 1003, 1102-3;—marketing, native co-operative, 1475;—native cultivation, 907-8;—price dispute, 908, 1476; coco-nuts and copra—copra improvement, 915;—native cultivation, 910, 915; fruit, citrus, native

Gold Coast—Agriculture (*cont.*)

cultivation, 918; kola nuts, native production, 890; maize, native cultivation, 892; palm products—decline in industry, 912-13;—reports, 1398;—native production, 912-13; pests and disease control, 971; rubber, 1016;—European production, 919; sesame, native cultivation, 900; tobacco, native cultivation, 917.

European rubber production, 919.

exchange visits, 957.

expenditure on, 1444.

interterritorial conference, 957.

land values affected by cocoa exports, 856.

livestock: hides and skins, 940; meat industry, 939; overstocking, and rinderpest control, 1103; stock-breeding work, 977; stock-farms, 977.

native: cacao, plantation production, 884; co-operative societies, 1474, 1475; crops, specialization, 1425; education, 1247;—Achimota College, 1250;—training provision, 968; mixed farming—erosion prevention, 1103;—introduction, 963.

official publications, 958.

research work, and staff, 951.

schools, 968.

Akan 'Stools', native chiefdoms, relations with British, 466.

Anglo-French convention, effect on tariffs, 1343.

Annexed to Crown (1901), 470.

Anthropological inquiries in, 47, 48, 1614.

British colonial policy, withdrawal advocated, 133.

Broadcasting, stations and service, 1300.

Cape Coast: municipality constituted, 519; representation on Legislative Council, 172; Town Council, composition and competence, 523.

Capital: investment, 1318; public tested, 1319.

Census in, 118-19.

Chamber of Mines, representation on Legislative Council, 172.

Chambers of Commerce, representation on Legislative Council, 172.

Chiefs' deputation to Colonial Office, 162.

Gold Coast (*cont.*)

Civil service: African—appointments, 224;—conditions of service, 235;—employment in, 235; native affairs appointments, 227; pensions cost, 1444.

Co-operation, native: 1474-6; cocoa price dispute, 1476; credit and marketing combined, 1474-5; registration and supervision, 1476; societies, members and capital, 1475; system criticized, 1476; urban societies, 1476.

Customs and Excise, revenue, 1459.

Economic penetration, 1398.

Economic system, native: agricultural production, increased specialization, 1425; cocoa dominant factor in, 1398; income per head of population, 1400.

Education Department, report on use of vernacular, 69.

EDUCATION, NATIVE:

account keeping for co-operative societies, 1476.

Achimota College: 94, 1248; comprehensive course, 1247; cost and administration, 1249; courses, arts and science, 1250; fees, 1287; girls' secondary school, 1256; library, 1294; London degree examination, 1254; policy, 1249-50; press, 99; religious training, 1249; teacher training, 1251; university standard, 1249; vocational and medical training, 1250; wood-carving introduced, 1290-1.

advisory committee, composition, 1239.

agricultural training, 968.

departmental training courses, 1247.

expenditure on, 1444.

fees, school, 1287.

female, 1256.

higher, 1249-50.

language policy, 1259.

medical subordinate staff, 1190-1.

schools, agricultural, Cadbury Hall, 1247.

schools, native authorities responsibility for, 1241.

secondary, 1242.

teachers, training facilities, 1251.

vocational: 1247; extent in Northern Territories, 1245.

Erosion, extent, 1102-3.

Export duties—diamonds, 1531;—revenue, 1444.

EXPORTS: bananas, 902; cocoa, 1327-8,

Gold Coast—Exports (*cont.*)

1398; decline in value, 1328; diamonds, 1514; hides and skins, 940; kola nuts, 890; lime-juice, oil, and fruit, 918; manganese, 1503; oranges, 917; palm oil and kernels, 913, 1398; percentage to Great Britain, Germany, and United States of America, 1330; rubber, 919; surplus over imports, 1351-2; timber, 1003, 1398.

Kumasi: administration of, 523; agricultural station, 951; Crown lands, registration of titles advocated, 858; Public Health Board, composition and competence of, 523.

Finance, public: customs and excise revenue, 1459; debt, 1444;—charges, 1351; expenditure, 1444; loan redemption, 1324; pensions, 135;—social and developmental, 1432; mining revenue, 1462; railways, 1586-7; revenue, 1443-4.

Forests: area, 1002; deforestation, and its effects, 1002-3; economic exploitation, 985; forestry service—native training, 1021, 1247;—staff, 1003; investigation, progress, 1011; northern protective belt, 1003; products, rubber, 1016; reserves—area, 1002-3;—creation under Forestry Bill, and administration, 1002;—native opposition, 1002; timber exports, 1398.

Franchise qualification, 172.

Free trade established, 135.

Government: administrative divisions of, 172; anthropologist, 54; British reluctance to assume responsibilities, 466; defects in native policy, 470-1; Executive Council, composition of, 172; expenditure on, 1444; historical review, 466-7; legislative assembly, institution of, suggested (1852), 466; legislative council—composition of, 172;—Governor's powers of nomination, 172;—instituted (1876), 467; municipal government, 519; policy of, in maintaining 'stool' authority, 470-1; system, 465; urban administration, 523.

HEALTH AND MEDICINE:

child welfare centres, 1169.

disease: leprosy, high incidence, 1142; plague, minor outbreaks, 1135; silico-tuberculosis, 1150; yellow fever, endemic area, 1128.

Gold Coast—Health and Medicine (*cont.*)

government organizations, leprosy work, 1142.

health services: expenditure on, 1444; native subordinate staff, training, 1190-1; native training at Achimota, 1250; organization, staff, and expenditure, 1169-70.

hospitals: accommodation and patients, 1169-70; mental, 1151.

missions, leprosy work, 1142.

research institutions, 1161.

Import duties customs revenue, 1444.

Imports: government, 1340; percentage of British African, 1335; proportion of different, 1334-5; rice, 895; timber, 1003; value per head of population, 1334.

Judicial system: Ashanti native courts, 473-5; chiefs' judicial claims, 470; chief's 'oath', effect on, 468; effect of, on native land tenure, 856; juvenile offenders, 313; native courts—appeals from, 288;—composition and competence under 1883 Ordinance, 467-9;—Native Jurisdiction Ordinance (1878) as basis of, 467;—supervision, 306, 473; Northern Territories, native courts, 476-7; Provincial Council (native) recognized, 471; reform advocated, 469-70; 'the Bond' (1844) and organization of, 466.

Labour, native: compulsory, regulations, 620; employees, numbers, 607; portage abolished, 629; recruitment for mines, 642, 643; welfare conditions, 678.

Languages in: 76, 94; orthography adopted, 80.

Law, source of, 470.

Legislation: governors' powers, 172; native co-operation, 1475.

Liquor, control and taxation, 1443-4.

Land:

alienation: to alien natives, 828; to non-natives by private purchase, control, 827.

chiefs' rights, 875.

laws, term 'native' defined, 829.

mineral rights, 1520.

pressure on, through population density, 835.

seignior rights, revival question, 875.

'Stool': alienation by chiefs, 856, 857,

Gold Coast—Land (*cont.*)

858; forest reservation and 'stool' rights, 1002.

tenure: government policy, 868; jurisdiction of chiefs, definition by special processes, 829; native customs—changes in, 856–8;—judicial decisions on, 840;—modifications opposed, 834;—studies of, 839, 840; native titles—litigation over, 856;—recognition and registration questions, 856–8, 875;—statutory law and, 829;—transfers, English documentary forms used, 856.

values enhanced by cocoa exports, 856.

Meteorological service in, 15, 16.

Minerals: diamonds, 1513–14;—export duty, 1444, 1531; gold, 1502–3;—export tax, 1444; rights, ownership, 1520.

Mines:

capital invested, 1322.

Concessions Court, 1527.

diamond: area and production, 1513–14; Consolidated African Selection Trust, 1514; native, 1514; West Diamond Syndicate, 1514.

employees, numbers, 607, 678.

gold: development, 1398, 1502–3; native workings, 1502; production, 1502–3.

labour: conditions, 678; recruitment, 642–3; short-term employment, 497.

railway construction for, 1586.

regulation, 1526–7.

revenue contribution, 1462.

silicosis prevalent, 1150.

taxation: 1444; gold royalty, 1531; profits, 1531.

timber-cutting concessions, 1002.

Missions: educational work, 1251;—Greek teaching, 1245; German, work on language, 94.

NATIVE ADMINISTRATION:

Ashanti, 473–6.

chiefs: councils, competence, 471; 'destoolment' problem, 469; judicial claims, 470; 'oath', its effect on justice, 468; position as 'stool' representative, 470–1; powers, 471; powers under 1883 Ordinance, 467–9.

defects in system, 468–9.

grants, medical missions, leprosy work, 1142.

Gold Coast — Native Administration (*cont.*)

Indirect Rule: educated African's attitude, 541; policy, 536.

judicial system, *see under* Gold Coast, judicial system.

Legislative Council set up, 467.

native authorities: educational duties, 1241; revenue, 469; revenue problem, 471–3.

native treasuries, revenue in Northern Territories, 586.

native treasury question, 471–3.

Northern Territories, 476–6.

Provincial Council, composition and competence, 471.

reorganization under Native Administration Ordinance (1927), 471.

Secretary and Assistant Secretary for Native Affairs, appointments, 227.

urban areas, 523.

Navrongo, land tenure, native customary, demarcations, 856.

Peoples of, diversity of political organization, 27.

Pong-Tamale: underground reservoirs, 1048; veterinary research at, 951.

Population: increase, 119; native, occupations, 1426.

Railways: construction, mining influence, 1586; finance, 1444, 1586–7, 1606; Kumasi line, 1398; lines and mileage, 1586; Sekondi–Kumasi, realigned, 5; staff, 1586; state department, 1586; Tartswa line, 1398.

Rainfall records, 15–16.

Roads: construction and maintenance cost, 1558; future policy, 1560; mileage and classification, 1559; motor services, government, 1559; railway competition, restriction, 1559–60.

Sekondi: representation on Legislative Council, 172; Town Council, composition and competence, 523.

Survey: employment of Africans, 9; undertaken for Gambia, 1516.

Syrians, commercial activity, 1425.

Tafo agricultural station, 951.

Takoradi harbour: finance, 1444; land titles, registration advocated, 858; works, 1.

Tamale agricultural station, 951.

Tarkwa deep-mining area, silicosis investigation, 1150.

Gold Coast (*cont.*)

TAXATION:

mining: gold royalty, 1531; profits, 1531.
 native: cocoa export duty, Southern Provinces, 585; customs revenue, Southern Provinces, 585; direct taxation—collection, 599—not applied in Southern Territories, 594;—opposition, 585, 595; Northern Territories, system, 477, 586; profits, 1444; tribute tax—allocation, 586;—Northern Territories, 585–6.

Trade balance, 1351–2.

Transport, air: expenditure, 1661; local, Elders Colonial Airways, Lagos—Freetown service, 1600; trans-African, French services, 1600.

Vital statistics registration, 119.

Water supply: drinking-water question, 1048; reservoirs, underground, 1048; survey and recommendations, 1048; Water Department, 1048.

Westermann, Dr., visit, 80.

Zuarungu, land tenure, native customary, demarcations, 856.

Gold Coast, Provinces

ASHANTI:

administration, 473–6.

Asantehene's powers, 474.

chiefs: appointment of, 476; destooling, 475.

Confederacy Council: composition and powers, 474; resistance to British control, 466.

confederation dissolved, 473; restored, 473.

labour, native, communal labour regulations, 610.

land: concessions, control, 778; Crown, area, 777–8; policy, 777–8; tenure systems, Islamic influence on, 832.

mining regulations, 1526.

native authorities in, 473–4;—revenue and accounts, 475; native courts, constitution and competence under Native Courts Ordinance (1932), 473–5; native treasuries in, 474; stool treasuries constituted, 473.

tsetse fly distributed, 1129.

wars, 133, 467.

COLONY:

Land: concessions, 778; control, 776–7; early history, 775–6; litigation,

Gold Coast, Provinces—Colony (*cont.*)

777; native rights, 775–7; policy, 775–7; stool—concessions by chiefs, 776;—definition, 776.

mining: concessions, system of granting, 1526; regulations, 1522, 1526.

tsetse fly in, 1129.

NORTHERN TERRITORIES:

education, native responsibility, 1241.

labour, native, communal labour regulations, 610.

land: alienation—control, 779; by state, terms, 825; concessions, control, 778–9; native—definition, 779;—mineral prospecting regulations, 1522; policy and control, 778–9; rent, control, 779; tenure, native, demarcation and transfers, extent, 850.

minerals, prospecting in native lands, regulations, 1522.

mining rights regulation, 1526.

native administration reformed (1928): 476–7; native courts—before 1928, 476;—composition and competence under Ordinance (1935), 477; native treasuries, revenue and expenditure, 477.

Protectorate proclaimed, 476.

Southern Provinces, import and export duties, 585.

taxation in, 585–6.

transport facilities insufficient, 1608.

tribal organization in, 476.

Gold Coast, *see also under* British West Africa.

Gold Coast Farmer, publication of, 958.

Gold Coast Year Book of Agriculture, publication discontinued, 958.

Goldie, Sir G.: influence on British colonial policy, 133; National African Company formed, 1396; principles of native administration laid down by, 416–17.

Gombolola chiefs, Buganda, 445–6.

Gordon, Dr. H. L., studies of mental capacity of Africans, 36–7.

Governors' Conferences (British East Africa), *see under* British East Africa.

Great Britain.

Advisory Committee on Timbers (Imperial Institute), 1623.

Advisory Council for Plant and Animal Products, 1621.

Great Britain (*cont.*)

- Agricultural Parasitology, Imperial Bureau, functions and location, 944.
- Agricultural Research Council, 1619.
- Animal Genetics, Imperial Bureau, functions and location, 944.
- Animal Health, Imperial Bureau of, functions and location, 944.
- Anthropological studies, 51-3.
- Bechuanaland: history of connexion, 403-7; question of jurisdiction, 412.
- Berlin Act signatory, 1341.
- British Association, Johannesburg meeting, 1626.
- British Broadcasting Corporation, co-ordination with imperial services, 1297-8.
- British Empire Leprosy Relief Association: 1624; grants, medical mission to Brit. W. Africa, 1141; work in Africa, 1141.
- British Film Institute, co-operation, Bantu Educational Kinema Experiment, 1302.
- British General Medical Council, 'licentiate' diplomas, recognition, 1183.
- British Medical Association, East African meetings, 1161.
- British Museum (Natural History): African work, 1621; research, 1616-17; tropical plants studied, 943-4.
- British Social Hygiene Council, film library, 1199.
- Broadcasting, empire services, committee of inquiry, 1297-8.
- Bureau of Hygiene and Tropical Diseases: organization and functions, 1159, 1618, 1623; statistical work of, 127.
- Cable and Wireless, Ltd., Nairobi wireless station operated, 1299.
- Colonial Advisory Committee on Education set up, 1229.
- Colonial Advisory Council of Agriculture and Animal Health, co-ordination of policy, 955.
- Colonial agriculture, Cocoa Inquiry Commission: 908; compulsory production, attitude towards, 630.
- Colonial Development Act (1929), terms of, 1320-1, n. 3.
- Colonial Development Dept., forestry work, 1009.
- COLONIAL DEVELOPMENT FUND: African expenditure, 1628.

Great Britain—Colonial Development Fund (*cont.*)

- development assistance, 1357.
- grants: cinema for health propaganda, Nigeria, 1302; coffee research station in Tanganyika, 948; debt interest, Nyasaland, 1408; erosion control, 1093, 1098, 1113; essential oils investigation, 919; forestry, Tanganyika, 997; health work, Nyasaland, 1163; hospital construction, Sierra Leone, 1191; hydrographic survey, Tanganyika, 1045; malaria research, Tanganyika, 1164; native reserves development, Kenya, 813; pyrethrum investigation, 919; railway survey, Rhodesia, 1574; river-clearing, Bechuanaland, 1036-7; road-making, Sierra Leone, 1560; sanitary training centre, S. Nigeria, 1190; stock-farming in W. Africa, 976; survey, 1045; total, 1320-1, 1447; trypanosomiasis—control scheme, Nigeria, 1134;—research, Tanganyika, 1164; tsetse department, Tanganyika, 1132, 1164; tuberculosis research, Tanganyika, 1164; water supply, 1041;—Bechuanaland, 1037;—Nyasaland, 1043;—Tanganyika, 997.
- imperial grant to, 1445.
- loans: erosion control, 1084, 1098-9; N. Rhodesian, 1438; total, 1447; water supply, 1044.
- research activities and assistance, 1624, 1628.
- Colonial Empire Marketing Board, grant, 1446.
- Colonial Forest Resources Development Dept., 1008.
- COLONIAL OFFICE: Advisory Committees, 161, 1627; Colonial Council proposals discussed, xxi-xxviii; colonial deputations to, 162; Conference of Governors, 162; co-operation, Bantu Educational Kinema Experiment, 1302; films for Africans, centralization and distribution of information on, recommendation, 1301-2; Inspectorate proposals discussed, xxi-xxviii; Kenya—labour recruitment in, 641;—tax on large holdings proposed, 821;—taxation, stipulations, 550; medical staff, 1159; nutritional problems, advice, 1124;

Great Britain—Colonial Office (*cont.*)
 special commissions of inquiry appointed by, 162; survey committee, 5.

COLONIAL POLICY:
 administrative units, regrouping proposals, summary and conclusions, 1642.
 and Boers, 130.
 Buxton Commission (1921), recommendations on S. Rhodesian constitution, 159.
 Churchill White Paper, 'dual policy' enunciated, 136.
 cinema: Films Committee appointed, 1300-1; films for Africans, recommendations of Colonial Films Committee, 1300-1; films, supply lacking, 1301-2.
 Closer Union in Eastern and Central Africa: Commission's recommendations, 136, 168, 182-3; East Africa Commission, recommendations, 181-2; government's attitude, 183, 184; and inquiries, 181-3; Joint Select Committee and, 183.
 Devonshire White Paper, native policy defined, 135-6.
 E. African policy, 136-7.
 economic, the open door, developments, 135; 1340-5.
 education, native: Advisory Committee's definition of policy, 1281; aims and principles expounded, 1229-30, 1231; Colonial Office Memorandum (1925) on education and religion, 1270; examination system, 1253-4; Higher College of East Africa, 1248-9; Higher Education in East Africa—Commission's recommendations, 1232-3;—on agricultural and veterinary training, 964-5; similarity to Belgian system, 1270.
 financial assistance: estimate of amount, 1448; Nyasaland, 1447; policy and method, 1445-8.
 forestry, Standing Committee on Empire Forestry, Colonial Office representation, 161.
 Gold Coast, reluctance to assume control, 466-7.
 government, employment of Africans, conclusions, 1642-3.
 health services, Lovat Committee, 1622.

Great Britain—Colonial Policy (*cont.*)
 High Commission Territories, transfer to Union: 173-5; cabinet's attitude, 176; memorandum, 174-5; pledge to consult inhabitants, 174-5.
 historical development in W. Africa, 132-5.
 Indians in Kenya, statement, 336-8.
 indirect rule: 133-5; Bechuanaland, 411-13; criticisms, 143; implications, 1639-40; representative institutions, difficulty of reconciling, 1639-40; summary and conclusions, 1646.
 Kenya land leases, Colonial Office action, 746-7.
 Kenya-Uganda railway, financial aid, 1582.
 labour: Forced Labour Convention ratified, 629.
 land: sovereignty question, 798-9; tenure, policy undefined, 867.
 legislation, Conference on Operation of Dominion Legislation, 146.
 legislative devolution, 144.
 native administration, conclusions on policy, 1646.
 native development in E. Africa, 137-8.
 native interests paramount, 135-6.
 N. and S. Rhodesia union, attitude to, 180.
 Passfield White Paper, native policy enunciated, 136-7.
 political and social objectives, summary and conclusions: 1639; public interest in, 142.
 railway development aid: Nyasaland, 1577-8; and Tanganyika, 1579.
 representative government, problems, summary, 1641-2.
 self-government: 1639-40; in E. Africa, 135; Joint Select Committee, views on Kenya question, 169.
 transport, air, trans-African, agreement for interterritorial air mail line, 1597.
 West Africa, considerations necessitating advance, and Select Committee (1865) recommendations, 467.
 white settlement in Kenya, 743.
 Colonial Secretary of State: Agricultural Adviser, periodic visits, 955; Kenya, land alienation from native reserves, permission required, 824; labour recruitment action—in Gold

Great Britain—Colonial Secretary of State (*cont.*)

Coast, 643;—in Kenya, 643;—in S. Rhodesia, 640; powers, 160-1; S. Rhodesia, land alienation from native reserves, permission required, 824.

COLONIAL SERVICE: African administrations, anthropological studies, 51; Agricultural Service Fund, finance, 1448; agriculture, training, 944; forestry, training and qualifications, 992; medical service, formation, 1159; records available for, incompleteness, 1615.

Congo Basin Treaties, advantages under, 1343.

Convention with Germany on Portuguese colonies, 1595.

Crown Colony Government, description of, 160-3.

Defence question and Dominions, 147.

Department of Scientific and Agricultural Research, 1619.

Dominions, status, Statute of Westminster, 146.

'Dual policy', defined, 136.

East Malling, Ditton Laboratory, research work, 944, 1619.

Economic Advisory Council: committees on special subjects, 1625; nutrition, special committee, 1124; research organization, 1618; Social Control Committee of, 1616.

Education of labouring classes, controversy, 1219.

Empire Cotton Growing Corporation: cotton breeding at Barberton, 904; Nigerian work, 950-1; research stations and work in Africa, 945, 1622.

Empire Marketing Board: 1619; finance, 1630; functions, 1617.

Erosion, central body lacking, 1113.

Experimental Malaria Unit, organization, 1619.

Exports: British African territories and proportions of different products, 1335-6; cotton piece goods—Br. E. Africa, decline, 1336;—Br. W. Africa, variations in, 1335-6;—Kenya, decline, 1336;—Uganda, decline, 1336; Japan, 1337.

Federation of British Industries, film group, films for Africans, distribution organization, 1301.

Finance, public: expenditure, social

Great Britain—Finance, public (*cont.*)

services, 1434; grants-in-aid—Kenya, 1441;—Nyasaland public debt interest, 1438;—Uganda, 1441; loans, Tanganyika railways, 1439.

Food Investigation Board, 1619.

Forests Products Research Laboratory, Princes Risborough, 1623.

Fruit Production, Imperial Bureau of, functions and location, 944.

Imperial Agricultural Bureaux: finance, 1446; functions and locations, 944, 1617-18, 1621, 1622; livestock research, 1622; publications, 1159-60, 1617.

Imperial College of Tropical Agriculture, Trinidad: 1621; cacao trials, 951; Colonial Office representation, 161; co-operation adviser, Gold Coast, 1476; functions, 944, 1448, 1621; imperial grant, 1446; Low Temperature Research Station of, 1621.

Imperial Conference (1926): dominion status defined, 144; summary of proceedings quoted, 144.

Imperial Forestry Institute: 1008, 1623; check-lists compiled, 1010; colonial support, 1448.

Imperial Institute: 1621; Colonial Office represented, 161; forestry work, 1009; functions, 1616; mineral survey in British African dependencies, 1516; publications, 944.

Imperial Institute of Entomology: colonial grants, 1448; research, 944, 1618.

Imperial Mycological Institute, research by, 944, 1618.

Imperial Parliament: S. Rhodesia, amendments to constitution rejected, 382; Statute of Westminster, 146.

Imperial Tobacco Company, Nyasaland factory, 916.

IMPORTS: cocoa, 1332;—percentage from Africa, 1333; copper, 1332;—percentage from Africa, 1333; cotton, 1332; groundnuts, 1332; mahogany, percentage from Africa, 1333; palm-kernels, percentage from Africa, 1333; palm oil, 1332;—percentage from Africa, 1333; platinum, percentage from Africa, 1333; sisal, 1332; tobacco—from N. Rhodesia, 925;—from S. Rhodesia, 925; total, proportion from African dependencies

Great Britain—Imports (cont.)
 1333; walnut, percentage from Africa, 1333; wool—merino, percentage from Africa, 1333;—mohair, percentage from Africa, 1333.
Institute of Agricultural Parasitology, St. Albans, research, 944.
Institute of Education, simplified English research, 1295.
Joint Advisory Board for School Examinations in Colonies and Dependencies, 1253-4.
Language institutions, 71.
Liverpool School of Tropical Medicine, 1160, 1623.
Locust Control Committee, organization, 1616; see also Locusts.
London Diamond Buying Syndicate formed, 1511.
London School of Hygiene and Tropical Medicine, 1159, 1623; see also under Universities, London.
Lovat Committee on scientific research, 1622.
Low Temperature Research Stations, functions and locations, 944, 1619, 1621.
Macaulay Institute, Aberdeen, research at, 944.
Medical Research Council: co-ordinating work, 1625; finance, 1446; Tropical Research Committee of, 1619; work for African health, 1160, 1618, 1623.
Molteno Institute, Cambridge, research work, 1160.
Nutrition Committee, constitution and functions, 1160.
Nutrition, Imperial Bureau of, 1160.
Orders in Council, see under British Dependencies, law.
Palestine and East Africa Loans Act (1926), 1439.
Plant Genetics (Crops), Imperial Bureau of, functions and location, 944.
Plant Genetics (Herbage), Imperial Bureau, functions and location, 944.
Privy Council: land rights in colonies, report, 733-4; research organization, 1618-19.
Public opinion, and labour recruitment in Kenya, 641.
Research: agriculture—appointment of specialists, 954-5;—institutions, 954-

Great Britain—Research (cont.)
 5, 1616-23; development, 1617; institutions, 1616-23, 1627.
Ross Institute, 1159, 1623.
Rothamsted Experimental Station, Harpenden, agricultural research at, 944.
Rowett Research Institute, Aberdeen, 944, 1618.
Royal African Society, publications, 1620.
Royal Air Force, African Squadron, financial maintenance, 1445.
Royal Anthropological Institute, publications, 1620.
Royal Botanic Gardens, Kew: tropical crop plants studied, 943-4; work for Africa, 1613, 1616, 1621.
Royal Society: President, educational theories, 1219; Sleeping Sickness Commissions, Uganda, 1119, 1130, 1623.
Royal Society of Medicine, grant for plague research, 1130.
St. Germain Treaty ratified, 1342.
School of Oriental Studies, see under Universities, London.
Scientific and Industrial Research Dept., 1008.
Soil Science, Imperial Bureau of: bulletin on erosion as world problem, 1071; functions and location, 944.
Toc H, leprosy relief work, 1141.
Trade agreement, Union of S. Africa, 1343.
Tropical diseases, yellow fever preventive inoculation, 1129.
Tropical Medical Research Committee, composition and functions, 1160, 1619.
Welsh Plant Breeding Station, research at, 944.
Weybridge veterinary research laboratory, research, 944.
Great Lakes: evangelization of area, 1118; highland of, 3.
Green, Miss M. M., studies, 92, 840, 854.
Grenfell, G., Baptist missionary in Congo, 1269.
Grey, Sir G., natives, practical training for, in Cape Colony, 1218-19.
Griffiths, A. W. M., land customs of Chaga and Bukoba, studies on, 838.
Grigg, Sir E., Governor of Kenya: closer union recommendations, 182; East African Federation proposed by, 167; economy proposals, 234.

Griqua people, lands alienated by, 845.
 Grosskopf, Prof. J. F. W.: labour migration investigation, 704; native employees, numbers estimated, 606, 1362.
Grundbuch, German land record in Cameroons, 774.
 Guernut, M., president of committee studying native question, 188.
 Guinea, elevation and relief of, 3.
 Gur languages, 76.
 Gutmann, B., land customs of Chaga, study, 838.
 Gwara language, 88.
Gweabo Languages of Liberia, by Prof. Sapia, 73.

H

Habari, vernacular paper, 1295.
 Hadow Report on the Education of the Adolescent, S. Rhodesian adoption of recommendations, 1226.
 Hall, Sir A. D.: livestock as currency, suggested substitutes, 1069; Ukambe reserve, erosion, recommendations, 1098.
 Hamite people: branches of, 19-20; conquest of Bantu in Lacustrine kingdoms, 23-4; Eastern, description of, 18, 20; general description, 29; 'Half-Hamites', classification, 20; influence on African races, 20; Northern, 19; origin of, 20; religious beliefs, 29-32; Western, 19.
 Hamitic language group, 74.
 Hamito-Semitic language group, 75, 77-8.
 Hammond, Brig.-Gen.: capital investment in S. Rhodesia railways, estimated, 1573; Lake Tanganyika steamer service, recommendations, 1541-2; S. Rhodesia railways, recommendations, 1574; Zambesi bridge recommended, 1577.
 Harford-Battersby, Dr., work, in founding Livingstone College, 1117.
 Harlech, Lord, *see* Ormsby-Gore, Rt. Hon. W.
 Harmand, J., native political theory defined by, 139.
 Harmattan, sand distribution by, 1104.
 Harris, D. G., Tana river irrigation plan investigated, 1041-2.
 Hausa language: 79, 80, 92, 94, 97; Arabic influence, 78; development of, 93; dictionary, 92; fiction in, 93; lingua franca, use, 28, 92.
 Hausa people: aptitude for commerce, 1424; general description of, 28; penetration of W. Africa, 28; tin mines worked, 1500.
 Haute Volta, *see under* French West Africa, Upper Volta.
 Haya people: land tenure system, 835; political organization in Lacustrine kingdoms, 23, 24.
 Hehe language, 88.
 Hehe people, political organization in Tanganyika, 23.
 Herero: language group, 83; people, dispersed by Germans, 373;—rebellion in Ger. S.W. Africa, 726.
 Herskovits, Prof. M. J., linguistic scholar: author of *Kru Proverbs*, 73; studies of African anthropology, 56.
 Hertzog, Gen. J. B. M.: attitude to secession question, 145, 146; bills on segregation introduced, 154; criticizes British Government's attitude to transfer of High Commission Territories, 175; desires incorporation of High Commission Territories in Union, 174-5; impending transfer of High Commission Territories announced by, 175; Imperial Conference (1926) attended, 145; Nationalist Party led by, 145; native policy advocated by, 130-1, political opinions, 145; Prime Minister, 145; views on Union of S. Africa neutrality and defence, 147.
 Herzog, Dr. G., linguistic scholar, author of *Jabo Proverbs*, 73.

Health and Medicine.

Air transport and infection: convention controlling, 1152; problems of, 1303.
 Agriculture, inter-relation with, study needed, 1611.
 British Empire Leprosy Relief Association, work done in Africa, 1141, 1624.
 Child welfare: diets, deficiency, 1123; native women as teachers, recommendation, Union of S. Africa, 1222.
 Climate, effect on, 17.
 Colonial Development Fund (British) grant, 1163.
 Conferences: British Medical Association, E. African meetings, 1161; international silicosis (1930), 1150; Pan-African (1935), 1153;—plague control discussed, 1136; Representatives of Health Services, international, 1153; research, Br. E. Africa, 1203;—

Health and Medicine—Conferences (*cont.*)
co-ordination, 1161; yellow fever, 1161.

Congresses, Tropical Medicine of W. Africa, international, 1181.

Control, medical passports, 1200.

DISEASE:

blackwater fever: African immunity, 1126; causes, 1126-7; research, 1623;—needed, 1126-7; 1623.

causes, ignorance and mortality, 1117.

cerebro-spinal meningitis spread by migratory labour, 1199.

connexion with soil deficiency and malnutrition, summary, 1666.

deficient diets and, 1123.

detection, system inadequate, 1205.

dysentery, amoebic and bacterial, prevalence, 1151.

environment, influence, 1193-4.

epidemics, detection, system inadequate, 1205.

helminths: 1146, 1148; lessened by drainage, 1147; prevalence in rural areas, 1205; remedial measures, 1147-8; species, 1146.

ill health, native: 1121; incidence of, information required, 1152; labour efficiency, 697.

immunity: causes destroying African, 1199; cross, typhus, 1137; cross, yaws against syphilis, 1145; relapsing fever, local strains only, 1136; tuberculosis, lack of, amongst Africans, 1138-40; yellow fever, African to, 1127.

incidence in Africa: 1114; accurate knowledge unobtainable, 1152, 1205; summary and conclusions, 1653-4.

influenza, spread by migratory labour, 1199.

intermittent fevers, prevalence in rural areas, 1205.

leprosy: 1140-3; British Empire Relief Association, 1624; control by segregation, 1141; extent in Africa, 1140-1; institutions for treatment, 1141-2; propagation, 1140-1; prophylaxis, 1141.

malaria: control measures, 1124-6;—French dependencies, 1125;—rural areas, 1125;—townships, 1125; effects on development, 1124; immunity, African loss, 1125; incidence, 1124;—Belgian Congo, information col-

lected, 1125; mortality in rural areas, 1205; parasites, types, 1124; prophylaxis, quinine, 1124, 1126; spread by migratory labour, 1200.

malignant, prevalence, 1151.

measles, prevalence, 1151.

mental disorder, treatment, 1151.

mosquito reduction methods: malaria, 1124-6; and yellow fever, 1128.

native railway labourers, incidence amongst, 1593.

night blindness, vitamin A deficiency, 1123.

parasitic worms, *see under* Health and Medicine, helminths.

pellagra, deficient diets and, 1123.

phthisis, *see under* Health and Medicine, silicosis.

plague: 1134-6; carried by rodents, 1134; control—Pan African Health Conference discusses, 1136;—measures, 1134-5; endemic areas, 1135; incidence in E. and W. Africa, 1135; inoculation, 1136;—methods, in Africa and India, 1136; spread, causes require investigation, 1135-6.

pneumonia prevalence, 1150-1.

portage and infection dissemination, 1538.

prevalence in Africa, 1114.

preventive policy, 1114-15.

relapsing fever: 1136-8; case mortality rate, 1136-7; causes and characteristics, 1136; endemic areas, 1136.

research, *see under* Health and Medicine, research.

rock drill fever, *see under* Health and Medicine, silicosis.

scurvy, deficient diets, 1123.

silicosis, 674, 1148-50.

skin, vitamin A deficiency, 1123.

sleeping sickness, *see under* Health and Medicine, trypanosomiasis.

smallpox, vaccination for, 1150-1.

spread by aviation, problems, 1603.

syphilis: difficulty of distinguishing from yaws, 1144; prevalence in E. Africa, 1143.

treatment, compulsion, areas applied, 1197-8.

trypanosomiasis: 1129, 1134; causes and methods of infection, 1130-1; Congo Free State commission, 1120; control measures—Br. E.

Health and Medicine—Disease (*cont.*)

Africa, 1132;—French dependencies, 1133-4, and treatment, 1174-7;—Fr. Equatorial Africa, 1120;—medical passports, 1200;—Nigeria, 1134, 1168;—population transfers and native land tenures, 837-8; drugs used in treatment, 1133; epidemic, Victoria Nyanza, 1129-30; Dr. Koch's investigations, 1120-1; parasites, game as reservoir, 1131; protection by intravenous injections, 1133; research, Tanganyika organization, 1624; species of trypanosome, 1130-1; spread by migratory labour, 1199; Uganda epidemic, 119-20.

tuberculosis: 1138-40; African native and, 1139-40; bovine origin, 1140; increase, Union of S. Africa, 1123; infection rates, W. Africa, 1138; prevalence, European communities, 1140; silicosis complicated by, 1149; spread in Africa—causes, 1138-9;—by migratory labour, 1200.

typhoid fever prevalence: 1148; preventive measures, inoculation, 1148.

typhus: 1137-8; prevalence of different types—E. Africa, 1137-8; in Union of S. Africa, 1137.

ulcer, tropical, calcium deficiency and, 1123.

unwholesome rice and, Sierra Leone, 1123.

vectors: fleas—bubonic plague, 1134;—relapsing fever, 1136;—typhus, 1137; mosquitoes—malaria, 1124;—yellow fever, 1127-9; rodents, plague, 1134; ticks—relapsing fever, 1136;—typhus, 1137; tsetse fly, trypanosomiasis, human and bovine, 1129-31.

venereal: 1143-6; incidence—in Africa, 1144;—in Uganda, 1120;—in W. Africa, 1145; treatment—centres, 1144;—by injections, 1145.

yaws: 1143-6; difficulty of distinguishing from syphilis, 1144; treatment by injections, 1145.

yellow fever: African immunity, 1127; Dakar Conference, 1161; endemicity, provisional map, 1127-8; epidemics, 1127; infection through air transport, precautions, 1128; preventive inoculation methods, 1128-9.

Health and Medicine (*cont.*)

Education in hygiene, Fr. W. Africa, 1264.

Financial requirements, 1115.

Health education: by means of propaganda, 1198-9; native need for instruction, 1198.

HEALTH SERVICES:

Basutoland, 1156.

Bechuanaland, 1157.

Belgian Congo, 1178-81.

Biological Standardisation, Permanent Commission, composition and work, 1152.

British dependencies, organization, 1161.

Br. E. Africa, amalgamation, 1120.

British institutions, 1159-60.

Br. W. Africa, foundation, 1120.

Cameroons, Fr. Mand., 1176.

Colonial Medical Service, British, 1159.

co-operation with other departments, 1612.

development since War, 1121-2.

district officers, functions devolving on, 1205-6.

doctors in, and question of private practice, 1201.

Epidemic Intelligence Bureau, Singapore, 1154.

financial limitations, 1115.

French dependencies, 1171-2.

Fr. Equatorial Africa, 1177-8.

Fr. W. Africa, 1172-5.

Gambia, 1170-1.

Gold Coast, 1169-70.

hygiene propaganda duties, 1198.

improved standard of living, responsibility for, 1654.

International Missionary Council, 1154.

Kenya, 1165-6.

League of Nations, Health Section, composition and functions, 1152-3.

Medical Missions, British Advisory Council, 1154.

mobile medical sections: Nigeria, 1134; trypanosomiasis treatment, French and Belgian, 1133.

native doctors: employment, 1182; training, Union of S. Africa, 1218.

native education, schools: Dakar, 1121, 1183; Fort Hare, S. African Native College, 1183; Léopoldville, 1183; Makerere, 1248; Mulago, 1183, 1248; Yaba, 1183, 1184.

Health and Medicine—Health Services

(cont.)

native employment: 1115, 1192-3; need to extend, 1182; value of, 1148, 1654.
 native medical assistants, training: in Belgian Congo, 1186; Br. E. Africa, 1184-5;—Br. W. Africa, 1184; Fr. W. Africa, 1185-6; Union of S. Africa, 1183-4.
 native nurses, need for extended employment, 1193.
 nativesubordinate staff, training: in Belgian Congo, 1192; in Cameroons, Fr. Mand., 1191; facilities in High Commission Territories, 1187; in Fr. Equatorial Africa, 1192; in Fr. W. Africa, 1191; in Gold Coast, 1190-1; in Kenya, 1189-90; lack of uniformity, 1186-7; missionary, 1187; in Nigeria, 1190; in N. Rhodesia, 1188; in Nyasaland, 1188; in Ruanda-Urundi, 1192; in Sierra Leone, 1191; in S. Rhodesia, 1188; in Tanganyika, 1188-9; in Uganda, 1190; in Union, 1187.
 native women, education for, recommended, 1193.
 Nigeria and Cameroons, Br. Mand., 1167-9.
 N. Rhodesia, 1162-3.
 Nyasaland, 1163-4.
Office International d'Hygiène publique: constitution and functions, 1152; Int. Convention for Sanitary Control of Aerial Navigation, 1128.
 organization, summary and conclusions, 1654.
 payment question, *see under* Health and Medicine, payment for treatment.
 Portuguese colonies, 1181-2.
 proportion of population reached by, 1205.
 Rockefeller Foundation, International Health Division, 1153.
 Ruanda-Urundi, 1181.
 Sierra Leone, 1170.
 S.W. Africa, 1156.
 S. Rhodesia, 1158-9.
 Swaziland, 1157-8.
 Tanganyika, 1164-5.
 Togoland, Br. Mand., 1169-70.
 Togo, Fr. Mand., 1176-7.
 Uganda, 1120, 1166-7.
 Union of S. Africa, 1154-6.
 welfare departments, co-operation needed, 1197.

Health and Medicine—Health Services

(cont.)

welfare, native administrative regulations in Union, 673.
 Hospitals: lepers, special provision, 1141-3; mental provision, 1151; returns, use of International List recommended, 1204-5.
 Kenya, Digo medical survey, 116.
 labour: health safeguards in French dependencies, 644; migration—and health, 705; disease spread by, 1199-1200.
 League of Nations Malaria Reports, 1224-5.
 Livingstone, Dr., pioneer work, 1116.
 Livingstone College, aims, 1117-18.
 Missions, medical work: American Mission Board, 1116; Anglican Mission, 1156; Benedictines, 1119; Capuchin pioneers, 1115; Church Missionary Society, 1117, 1165, 1167; Church of Scotland Mission, 1165; Edinburgh Medical Missionary Society, 1116; Established Church of Scotland, 1117; Fathers of the Holy Ghost, 1116, 1119; Finnish Mission, 1156; Franciscan Sisters, 1167; Franciscans, 1119; International Missionary Council, 1154; Jesuits, 1119; leprosy, 1142; Lovedale Missionary Institution, work, 1116; Moravians in Cape Province, 1115; Nazarene, 1157; Neukirchen Mission Society, 1165; Nyasaland, 1118; Rhenish Mission, 1156; Roman Catholic doctors employed, 1119; Seventh Day Adventists, 1165; Society for the Propagation of the Gospel, 1116; United Free Church of Scotland, 1117; Wesleyan Methodist Missionary Society, 1117, 1118, 1157, 1165; Universities' Mission, 1116-17; White Fathers, 1118, 1119; White Sisters, 1118-19.
 Native attitude to European treatment, 1120.
 Nigeria, health areas, 677.
 Nutrition question, 1114-15, 1123, 1654.
 Papal Encyclical on training, 1119.
 Payment for treatment: Belgian policy 1201-2; French policy, 1201; native attitude, 1202; poll-tax, allocation from, as insurance contribution, suggestion discussed, 1202.

Health and Medicine (*cont.*)

Policy: Belgian system, intensive campaign method, 1195-6; British system compared with French and Belgian, 1196; comparison of different territories, 1196; employment of partially trained personnel, opinions divided on, 1194-5; French system—medical centres and mobile detachments, 1195;—military cadre doctors, disadvantages, 1195; information required for framing, 1152, 1204-5, 1639; public health work separated from medical, disadvantages, 1196-7; social aspects, 1193-7; state liability principle adopted, 1194; statistical data, importance of, for framing, 1152, 1204-5, 1639.

Private practice: doctors in state services, question of permitting, 1201; native doctors—British and French policy, 1200-1;—question of education for, 1200-1.

Publications: *Annales de Médecine et de Pharmacie Coloniale*, 1175; *Bulletin de la Société Belge de Médecine Tropicale*, 1178; *Bulletin of Hygiene*, 1159; *Epidemiological Report*, 1153; *League of Nations Health Organization Bulletin*, 1153; *Tropical Diseases Bulletin*, 1159.

Research: in Africa, work best suited for, 1204; Biological Control Laboratory, Capetown, 1153, 1616; Biological Standardisation, Permanent Commission, composition and work, 1153; blackwater fever, 1126-7, 1623; British dependencies, 1161, 1618-23; British Empire Leprosy Relief Association, and study of disease, 1141, 1624; British official bodies, 1627; Bulawayo Bacteriological Institute, 1158; Bureau of Hygiene and Tropical Diseases, 1159, 1618, 1623; Colonial Development Fund assistance, 1164, 1624; conferences, 1626; co-ordination, 1625;—conferences in E. Africa, 1161, 1626; development, 1122; entomology—anopheline mosquito investigations, 1124;—tsetse flies, 1130-2; Experimental Malaria Unit, work, 1619; fellowships, 1619; German work in E. Africa, 1120; Health Section, League of Nations, 1615-16; helminths, 1146, 1623; Human Trypanosomiasis Research Insti-

Health and Medicine—Research (*cont.*)

tute, Entebbe, 1127, 1166; *Institut de Médecine Tropicale Prince Léopold*, 1178; leprosy, 1141, 1143, 1616; Liverpool School of Tropical Medicine, 1160, 1623; London School of Hygiene and Tropical Medicine, 1159, 1623; malaria, 1124, 1616, 1619, 1624; malignant disease, prevalence, 1151; meaning of term in Africa, 1203; Medical Research Council, work, 1160, 1618, 1619, 1623; Medical Research Laboratory, Nairobi, 1165; mental diseases, 1151; Moltano Institute, Cambridge, 1160; Nigeria, organization, 1127-8; nutrition, 1123, 1160; Nutrition Committee, British, 1160; organization, 1203-6, 1623-4; Pasteur Institute, African branches, 1172, 1175; plague, 1136, 1624;—and inoculation against, 1136; Rockefeller Foundation, International Health Division, 1153, 1616; Ross Institute, 1159, 1623;—and malaria control, 1125; School of Tropical Medicine, Lisbon, 1181; silicosis, 1148-9, 1624; South African Institute for Medical Research, 1155; S. Rhodesia government laboratory, 1158; Standing Medical Research Committee, recommendations, 1627; Tinde laboratory, Tanganyika, 1164; Tropical Medical Research Committee, composition and functions, 1160, 1619; trypanosomiasis, 1130, 1615-16, 1619, 1623; tsetse flies in Tanganyika, 948, 1624; tuberculosis, 1138, 1139, 1616, 1624; typhus fever, 1137; venereal disease, differentiation of yaws and syphilis, 1145; Witwatersrand University Medical School, 1155; Yaba Laboratories, 1168; yellow fever, 1127, 1616, 1619. Sanitary control of transport, problem, 1200.

Sanitation, defects in African villages, 1205-6.

Surveys, intensive, value of, 1152.

Text-books, native assistants and need of, 1193.

Training: Liverpool School of Tropical Medicine, 1160; London School of Hygiene and Tropical Medicine, 1159; native, *see under* Health and Medicine, health services (native education);

Health and Medicine—Training (*cont.*)
tax, medical, Togoland, Fr. Mand., 592.

W. Africa, disease prevalence, 1117.

Hides and skins, *see under* Agriculture, livestock.

High Commission Territories.

agriculture: crops, maize, native cultivation, 891-2; livestock, stock-breeding work, 975-6; native, food production, decrease, 886.

aviation, *see under* High Commission Territories, transport.

census in, 110.

economic development, *see under* Union of S. Africa, economic development.

education, European, 1259.

education, native: higher, financial support to Fort Hare Native College, 1218; medical subordinate staff, 1187.

exports, destination, 1329.

Great Britain's failure to develop, 176-7.

health and medicine, health services, native subordinate staff, training, 1187.

labour: contract, travelling costs borne by employee, 657; recruitment by chiefs, present position, 649.

legislation in, 163.

meteorological services, 15.

mining regulations, 1524-6.

mines, native medical training grant by industry, 1187.

native administration: comparative study, 416; differs from Nigeria, 242; officials, training courses in anthropology, 54.

native areas, 393-4.

native economy, development, 1408-16.

relations with Union, 174.

taxation: native direct, collection from absentees, 562; non-native direct—income, rates, 549;—system, 549.

transfer to Union: British interest, 142; native feeling, 174-5; native opposition, 175, 176; provision for, 174; question discussed, 173-7; Standing Joint Advisory Conference set up, 175.

transport, air, Sir A. Pim's recommendations, 1599.

High Commission Territories (*cont.*)

BASUTOLAND:

agriculture: crops: sorghum, native cultivation, 893;—wheat, native cultivation, 889; livestock—hides and skins, 939;—over-grazing, 1084;—native, merino sheep industry, 931; native demonstrators, 966; wool, 941.

co-operation, native, attempts to establish, 1471.

economic system: balance of payments, 1409-10; maize exports and imports, 1409.

education, native: female, 1255; levy for, 1239; schools—Lerothodi Technical, 1239;—trade, Lerothodi Technical, subjects taught, 1246; secondary, 1242.

erosion: 729; area for reclamation, 1085; control measures and expenditure, 1084-5; gully, 1058; native attitude to control, 1085; over-grazing and, 1084; soil-wash and gully-ing, 1084.

exports: cattle, 1410; hides and skins, 939; invisible labour, 1409-10; value, 1409-10; wheat, 1410; wool, 941; wool and mohair proportion, 1410.

finance, public, native tax revenue, 1458.

forests, afforestation work, 990.

government: 395; British authority's powers, 397; dual character of, 398-9.

health and medicine: health services, organization, staff and expenditure, 1156; hospitals, numbers and patients, 1156; leper station, 1142.

highland of, 4.

history up to assumption of imperial control, 394-5.

imports: general merchandise, extent of, 1411; value, 1409-10.

judicial system: 395-7; British courts, powers, 396; native courts, 396.

labour, native: communal labour regulations, 609-10; compulsory labour, regulations, 617; emigration and fall in prices, 1410; migration, 700-1; recruitment, historical, 637; sale of, and balance of payments, 1409-10.

land: alienation to non-natives by private purchase, control, 827; allocation, regulations governing, 729;

High Commission Territories—Basutoland (*cont.*)

chiefs' reservations, 609; concession supervision, 729; grants, 729; mineral prospecting prohibited, 1521; mineral rights, ownership, 1519; native rights, British preservation, 728-9; shortage, 729; tenure—registration recommended, 867;—systems, influence of paramount chief, 832; treaty provisions respecting, 728.

language, 82.

law, native customary, laws of Lerothodi, 396.

minerals: prospecting prohibited, 1521; rights, policy, 1519.

mines, prospecting, objections to, 1491.

national feeling in, 399, 400.

native administration: administrative divisions, 396; chiefs' powers, 395-7; elective representation movement, 398; Kgotla (chief's council), functions, 396; National Council—composition and functions, 397-8;—criticized, 399-400; native courts, 396;—powers, 395-6; paramount chief, powers and duties, 397; Pitso, 398; Progressive Association of Basuto, programme, 398; reform in, advocated, 399-400.

Pitso accepts British control, 394.

population: congestion, 729; increase, 1084.

rainfall, 1084.

Rand labour recruited from, 652.

roads, mileage and construction programme, 1551.

taxation, native direct: collection system, 559-60; education levy, 1239; hut tax, imposition and rate, 558-9; liability, 559; plural wives, taxation, 559; poll tax imposed, 559; rate of, 559; revenue proportion from, 1458.

treaties: Aliwal North (1869), 728; of Thaba Bosigo (1866), 728.

treaty rights in, 833.

water supply: drinking-water provision, 1038; irrigation, plans, 1038.

BECHUANALAND:

agriculture: cattle, meat industry, 938; crops—pulses, introduction recommended, 900;—rice, Okavango swamp cultivation scheme, 1037;

High Commission Territories—Bechuanaland (*cont.*)

dairying—butter production, 942;—cheese production, 942;—cream production, 942; hides and skins, 939-40.

annexed to Cape, 404.

Bantu village, forms of, 23.

Bechuana people, organization, 403.

British control of, history, 403-7.

British South Africa Company in, 403.

chiefs' deputation, 162, 406.

co-operation, native, non-existent, 1471.

education, native: Board of Advice on, anthropologist included, 49; female, 1255; levy for, 1239; local committees, 1239; schools, trade, Tiger Kloof Industrial School, 1246; secondary, 1242; subordinate health staff, 1187; tribal levy, 1239.

European settlement in, 402-3.

exports: cattle, slaughter, 938; cheese, 942; timber, 990.

finance, public, debt, 1446-7.

forests, timber felling and export, 990.

government: Advisory Committee, European, 163, 408; British jurisdiction, development, 730-1; Chamberlain's agreement with chiefs on, 406; Crown colony, 404; indirect rule theory applied to, 411; policy of British Government, 412-13; powers of, 408; protectorate system, 405; sovereignty, British definition, 404.

health and medicine: health services—native subordinate staff, training, 1187;—organization, staff, and expenditure, 1157;—travelling dispensary unit, 1157; hospitals, numbers and patients, 1157.

historical antecedents of protectorate, 403-7.

imports, general merchandise, extent of, 1411.

judicial system: 407; chiefs' courts, 407;—position under Native Administration Proclamation (1934), 409-10; Kgotla (tribal council) judicial powers, 407; native courts—present organization, 410-11;—regulation under native Tribunals Proclamation (1934), 306;—reorganization, 409-12.

labour, native: communal labour, regi-

High Commission Territories—Bechuanaland (*cont.*)

mental system, 610; migration, 700; recruitment, historical, 637; regimental labour, use of, 617.

land: alienation—area alienated, 731;—to non-natives by private purchase, control, 827; concessions—by chiefs, 731;—supervision, 731;—Tati block question, 731; Crown—alienation, 732;—area, 731;—definition, 731; European, area, 731-2; minerals—prospecting regulations, 1521;—rights, ownership, 1519; native reserves, area and demarcation, 731; ownership, British disclaimer, 730-1; question of sovereignty, 404; tenure, native—study on, 838;—system of, Tswana, 831.

language, Tswana, 82-3.

law, native customary, recognition, 405.

legislation, power of, 405.

minerals: gold, 1491; prospecting, regulation, 1521-2; rights, 1519.

mines: coal, levy per ton, 1530; concessions, companies holding, 1525; gold, production and value, 1491; Tati Company, 1524.

native administration: British reluctance to assume control, 404; chiefs'—council, present organization, 411;—powers, 407-8;—revenues, 408; council system, 407; Native Advisory Council, functions, 408-9; native courts, *see under* High Commission Territories, Bechuanaland, judicial system; system laid down (1895), 406.

native economy, foodstuffs imported, 1409.

physical features of, 4.

railways, system, 1571; *see also under* Southern Rhodesia, railways.

Rand labour recruited from, 652.

roads, mileage and quality, 1551.

Prof. Schapera commissioned to study native law, 54.

survey, water-supply and, 1037.

Tati Company in, 403.

taxation: mining, coal levy, 1530; native direct—collection system, 560-1;—education levy, 1239;—general tax instituted, rate, 560;—hut tax imposed, 560;—incidence, 561;—

High Commission Territories—Bechuanaland (*cont.*)

payment in cash or kind, 560;—poll-tax, rate, 560.

water supply: boreholes, progress and policy, 1037; dams—construction, 1037;—surface contour, construction, 1037; deficiency, 1036; development grant, 1037; irrigation, Kalahari proposal, 1036; Okavango river, clearing operations, 1036-7; rivers, silting-up and clearing, 1036; wells, 1037.

SWAZILAND:

agriculture: crops—pulses, native cultivation, 900;—tobacco, European production, 925; European—capital shortage, 918;—cotton, 918;—extent of, 918;—maize, 918;—tobacco, 918; livestock—dairying, cream production, 942;—overgrazing, 1084; native—demonstrators, 966;—farm tenants, position, 750;—foodstuffs, proportion grown in territory, 1408-9;—tobacco, marketing through European co-operation, 1471; research, Empire Cotton Growing Corporation station, 945.

anthropological work in, 219.

Bremersdorp, Empire Cotton Growing Corporation Station, 945.

co-operation, native, through European marketing organization, 1471.

education, native: medical subordinate staff, 1186-7; schools, Matapa, native aid, 1239; secondary, 1242.

erosion, extension feared, 1085.

Europeans in, 400.

exports, tobacco, 925.

finance, public: debt, 1446-7; non-native direct tax revenue, 1459.

forests, 990.

government: 401; Advisory Council (European), 163, 401; dual character of, 400; executive powers, 401.

health and medicine: health services—native subordinate staff, training, 1186-7;—organization, staff and expenditure, 1157-8; hospitals, numbers and patients, 1157-8; missionary work, 1157.

history up to 1906, 401.

judicial system: 401; native courts, 401.

labour, native: compulsory labour, regulations, 617; migration, 700.

High Commission Territories—Swaziland (*cont.*)

land: concessions—by chiefs, 729;—question of validity, 729; Crown—alienation, 730;—area, 730;—definition, 729–30; European—area, 730;—owned, 918; native—area, 730;—farm tenants, position, 730;—reserves, area set aside, 729;—rights, British policy, 729; tenure systems, influence of paramount chief, 832.

minerals: asbestos, 1491; coal, 1491; concessions granted by chiefs, 1525; gold, 1491; tin, 1491.

mines: gold, production and value, 1491; prospecting and concession areas, 1525; regulation, 1525; tin, production and value, 1491.

missions: Nazarene, medical work, 1157; Wesleyan, medical work, 1157.

native administration: chiefs meetings and powers, 402; general assembly, 402; Swazi National Fund, revenue, 561.

native economy, foodstuffs imported, 1408–9.

population, native, its distribution, 400.

Rand labour recruited from, 652.

roads, mileage and quality, 1551.

survey, irrigation plans, 1038–9.

Swazi National Fund, revenue and objects, 402.

taxation: mining, 1525; native direct—collection, 561–2;—dog tax, 561;—poll tax, rate, 561;—Swazi National Fund levy, 561; non-native direct, revenue from, 1459; Sir A. Pim's proposals, 549.

water supply: dams, small, need for, 1039; irrigation, schemes projected, 1038–9.

Higher College of British East Africa, *see under* British East Africa, education (native).

Hillside research station, *see under* Southern Rhodesia.

Hilton Young Commission, *see under* British East Africa; Great Britain, closer union.

Hima people: cattle-owners, 882; ruling class in Lacustrine kingdoms, 24.

Hirzfeld, L. and H., work on blood-groups, 33.

Holland, *see* Netherlands.

Homburger, Mlle, French linguistic scholar, 72.

Horn of Africa, desert conditions, 13.

Hotine, Major, air survey work, 7.

Hottentot language, 75.

Hottentot people: description of, 19; differential treatment abolished (1828), 150; position in S. Africa as labour supply, 346.

Hottentot-Bushman language group, 74.

Housing, native: clay bricks as trypanosomiasis control measure, 1131; hut burning custom reduces tuberculosis infection, 1139; improvement needed to reduce relapsing fever, 1136; native employees—N. Rhodesia, 675;—S. Rhodesia mines, 674;—Union of S. Africa, 673; overcrowding propagates leprosy, 1140; and tuberculosis, 1138, 1139; village conditions and shifting cultivation, 881–2.

Howard, Sir A., composting method, Indore process, 1066.

Howard, Dr., medical missionary work, 1118.

Hoyer, Dr., linguistic specialist at Chicago University, 101.

Hoyle, F., and Davy, J. Burt, Nyasaland forestry check-list compiled, 1010.

Huggins, Hon. G. M., Prime Minister of S. Rhodesia: assumes Ministry of Native Affairs, 382; his constitutional demands, 158.

Huileries du Congo Belge, *see under* Belgian Congo, industrial concerns.

Huilever Company, *see under* Belgian Congo, industrial concerns.

Hulstaert, Father, French scholar in Congo languages, 72.

Hunter, M., land tenure system of Pondo-land natives studied, 838.

Huss, Rev. B., propaganda, native co-operation in, recommended, 1470.

I

Ibo language: 76, 91; grammar, 92; orthography, 91; Translation Bureau, 91, 92.

Ibo people: land tenure customs—in-vestigation resisted, 837;—sales forbidden under, 854;—studies of, 839–40; political organization, dispersion of authority, 26–7; secret societies for women, objects, 27–8.

Igala people, political organization of, in W. Africa, 27.

Igbirra people, political organization of, in W. Africa, 27.

Ila language, 86.

Ila-Tonga language, 86.

Immigrant communities: problem of, 316-44; *see also under* Arabs, Indians, and *under* Kenya; Tanganyika; Uganda; Union of S. Africa, Indians.

Imo river, transport use, 1545.

Imperial Agricultural Bureaux, *see under* Great Britain.

Imperial Airways, *see under* Transport, air, and territories.

Imperial British East Africa Company, *see* British East Africa Company.

Imperial Cold Storage Company, meat depot in S.W. Africa, 938.

Imperial College of Tropical Agriculture, Trinidad, *see under* Great Britain.

Imperial Forestry Institute, *see under* Great Britain.

Imperial Institute, *see under* Great Britain.

Imports: African, in relation to world, 1334; colonial—advantage of mother country in obtaining, 1346-7;—problem of obtaining, 1346-8; government, sources of, in British dependencies, 1339-40;—no analysis, non-British territories, 1340; preferences given to mother country, restriction on, in African dependencies, 1340-1.

Imports and exports: currency, relation to, 1346; government orders, influence on destination, 1339-40; mother country's advantages, causes of, 1339-48.

INDIA: Agent of Government appointed in Africa, 325; agricultural credit, debt burden, 1429, 1466; 'Capetown Agreement' reached with Union government on Indian question, 324; co-operation, Tanganyika officer deputed to study, 1472; co-operative societies, 1469; educated unemployed in, 1263; erosion in, control, 1071-2; exports, cotton piece-goods—Br. E. Africa, decline, 1336;—Kenya, decline, 1336;—Uganda, decline, 1336; forest conservation in, 1060; imports, cotton, 1332; Indians in Africa, government's intervention on behalf of, 165, 328, 336-7; labour emigration to Natal, agreement on subject, 319-20; law, evolution contrasted with Roman,

262-3; livestock control measures, 1072; Mogul Emperors, land tenure system, 853; native administration, comparative study, 413-14; native economic development, British policy, 1431; passive resistance in Africa, inquiry urged, 323; plague, inoculation methods, 1136; population density, 2; rice from, tested in Sierra Leone, 951; yellow fever infection, precautions, 1128.

INDIANS:

Belgian Congo immigration policy, 316.

classification of, 117.

connexion with Africa, historical summary, 317-18.

craftsmanship close to African, 1426.

education in British dependencies, 1260.

indentured labour of, in Natal, 638.

in Kenya: 335-40; British Government's statement of policy, 337-8; education facilities, 338-9; European attitude, 337; franchise question, 164-6; history of community, 335; immigration regulations, 328; land acquisition restrictions, 74-7; land tenure question, 336-7; marketing control regulations opposed, 340; medical facilities, 328; occupations, 335-6; political representation, 336; representation on legislative council, 164-6; reservation of areas, 328; segregation question, 336; social services, contribution, 339.

in South Africa: 318-34; Agent of Indian Government appointed, 325; 'Capetown Agreement', provisions, 324-5; civilized labour policy applied to, 326; Colonial Born and Indian Settlers Association, its policy, 328; commercial activities, 327; discriminatory measures—in Natal, 320;—in Orange Free State, 320-1;—in Transvaal Republic, 321; early colonists' attitude, 318-19; educational facilities, 330-1; franchise question, 327-8; health and welfare work, 333; housing question, 331-2; immigration control—in Transvaal, 322;—in Union, 322; indentured labour—in Natal, 319-20;—strikes, 322-3; Indian wives excluded under court judgement, 322; inter-provin-

Indians—in South Africa (*cont.*)

cial restrictions, 322; land ownership and occupation restrictions, 330; Natal Government subsidizes immigration, 319; numbers, 325-6; occupations, 326; passive resistance campaign, 321-3;—Union Government inquiry and recommendations, 323; present position and prospects of community, 333-4; racial disturbance at Durban, 320; residential segregation applied, 323-4; restrictions on acquisition of property, 323; segregation policy demanded, 323; social status, 332-3; South African Indian Congress, its work, 328; trade unions in Natal, admission to, 326; trading restrictions, 328-9.

in Tanganyika: 340-2; educational provision, 341-2; Indian Association formed by, 341; land holdings, 341; native marketing control opposed, 341; occupations, 341; position at end of War, 341; position under Mandate, 342; representation in legislature, 341.

in Uganda: 342-4; education provision, 343; native marketing control opposed, 343; numbers, 342; occupations, 342; relations with Europeans, 343; representation in legislature, 343; trading activities, 342-3; 'Uganda Association', 343.

in Zanzibar: 318; tuberculosis infection, 1140.

Nyasaland settlement, 1385.

problem of immigrant communities, summary and conclusions, 1644-5.

traders, credit facilities, advantages over African, 1428.

trading activities, 1419, 1420, 1422.

INDIRECT RULE: allocation of tax under, 600; expression of political philosophy, 528-9; native administration policy, *see under* Great Britain, colonial policy, *also* Lugard, Lord; representative government and, 1639-40; significance of term, 527; *see also under* British Dependencies; Native Administration; and territories.

Indo-China: population density, 2; rice from, tested in Sierra Leone, 951.

Indore, composting process, 1066.

Indac, *see under* Belgian Congo.

INFANT MORTALITY: Belgian Congo, 128; British tropical African colonies, 128; diet deficiencies and, 1123; incidence, data inadequate, 1124, 1639; malaria, effect on, 1124; Nyasaland, 128; Uganda, northern province, 128; Union of S. Africa, 128.

Initiation ceremonies, African, purpose of, 1207.

Inspectorate, proposals for British dependencies, *see under* Great Britain, Colonial Office.

Institut Colonial International, publications issued by, 1633.

Institut d'Ethnologie, courses in anthropology, 55.

Institut International d'Anthropologie, publications, 54-5.

Institut Royal Colonial Belge, meteorological service, 15.

Institute of Agricultural Parasitology, St. Albans, *see under* Great Britain.

Instituto Elias Garcia, work in Moçambique, 1181.

Instituto João de Deus, work in Moçambique, 1181.

International Air Navigation Convention (1929), 1602.

International Committee of Experts on Native Labour, *see under* International Labour Conference.

International Committee on Christian Literature for Africa, 1294.

International Geological Conference, 1626.

INTERNATIONAL INSTITUTE OF AFRICAN LANGUAGES AND CULTURES: 92, 1620; Advisory Linguistic Committee, 74; African literature prize, 87; annual competition for Swahili, 69; Bantu Educational Kinema Experiment, co-operation, 1302; education, native, language policy, 1230; finance, 1621; linguistic research, 73, 74, 1621; native literary production encouraged, 1295; nutrition inquiry, 1620; orthography—recommendations, 85;—and work, 79; publications, 1620; research sponsored by, 51-2; Dr. Westermann, director, 80.

International Journal of American Linguistics, 102.

INTERNATIONAL LABOUR CONFERENCE (1935): Committee of Experts on Native Labour, opinion on future of

International Labour Conference (*cont.*)
recruiting, 658; contract labour,
travelling expenses, question dis-
cussed, 657; Forced Labour Con-
vention (1930)—adopted by, 650;—
British ratification, 617;—chiefs' rights
under, 611; forced labour recom-
mendations (1929), 611.
International Labour Office, *see under*
League of Nations.
International Missionary Council, *see*
under Missions.
Irrigation, *see under* Water Supply and
territories.
Ishan cotton, use in Nigeria, 950.
Islam, land tenure systems influenced by,
832.
ITALY: Berlin Act signatory, 1341;
Forced Labour Convention ratified,
629; imports, palm oil, 1332; language
institutions, 71.
Ivory: Congo Free State monopoly, 791;
trade in, 1313.
Ivory Coast, *see under* French West Africa.

J

Jabo Proverbs, by Dr. G. Herzog, 73.
Jajin Allah, waste land (N. Nigeria), 771.
James, Prof. A. Lloyd, work on phonetics,
76.
Jameson, Sir Starr, advocates union of
Rhodesias, 179.
Jangali, Nigerian cattle tax, 577-8, 579,
589, 597.
JAPAN: commercial competition under
Congo Basin Treaties, 1342-3; erosion,
1064, 1071, 1073; exports—cotton piece
goods to Br. W. Africa, Kenya, Uganda,
and Union of S. Africa, 1336-8;—
percentages to Anglo-Egyptian Sudan,
Belgian Congo, British dependencies,
Kenya, Nyasaland, Tanganyika,
Uganda, 1337; forest area, 1073;
imports—British African dependen-
cies, Br. E. Africa, Great Britain
and Empire, Kenya, Uganda, and
Union of S. Africa, 1337-8;—increase,
possible consequences, 1338; Treaty of
St. Germain ratified, 1342.
Jaspar, M., Belgian Colonial Minister,
speech on labour questions, 647.
Java: coffee from, tested in Nigeria, 951;
population density, 2.
Jeanes, Miss Anna T., bequest for train-

ing teachers for negro schools in
America, 1228.

Jeanes schools: chiefs' courses, influence
on hygiene, 1163; conference (1935),
inter-territorial, 1253; Domboshawa,
S. Rhodesia, teacher training at, 1252;
educational system of, 1228; female
education in N. Rhodesia, 1256;
Kabete, Kenya, teacher training pro-
vided, 1252; Mazabuka, N. Rhodesia,
teacher training provided, 1252; native
authorities training course, Nyasa-
land, 1257; system, adoption recom-
mended, Union of S. Africa, 1222;
teacher training centres, 1252; teacher
training—Mazabuka, 1250;—in Nyasa-
land, 1251; teachers, wives, training,
1255; training centre, co-operative
stores, Kenya, 1473-4; vocational
training at, 1248; Zomba, Nyasaland,
teacher training provided, 1252.

Jilal, grazing lands, Br. Somaliland,
1067.

Johnston, Sir H. H.: author of *Com-
parative Study of the Bantu and semi-
Bantu Language*, 74; land concessions in
Nyasaland, opinion as to validity,
755-6; proposals for East African
federation, 181.

Jones, Rev. A. M., native musical experi-
ments, 1291.

Jones, Prof. D.: linguistic scholar, 72;
work on phonetics, 76.

de Jonghe, Prof. E., quoted on Luba lan-
guage, 96.

Jordan valley, physical configuration, 3.

Jorge, Prof. R., description of plague in
Union of S. Africa, 1134.

Journal of the Royal African Society,
periodical publication, 1633.

Jowitt, H., Director (late) of Native
Development, S. Rhodesia, education
aims expounded, 1227.

Jukun people, political organization of,
in W. Africa, 27.

Justice, administration of.

cost in relation to economic standards,
302.

criminal judicial system in E. Africa,
opinion of Commission of Inquiry,
300.

European: conceptions—adjustment to
African, problems discussed, 294-
309;—summary and conclusions,

Justice, administration of—European (*cont.*)

1643-4; court procedure—contrasted with African, 297-8;—difficulties of adapting to African conditions, 298-9.

importance to populations, 280-1.

judicial functions, separation from administrative, discussed, 300-2.

judicial methods, adjustment to African conditions, comprehensive inquiry needed, 300, 1643-4.

juvenile offenders, punishment of, 313.

labour, native: 710-11; offences, penalties, 659-64.

NATIVE COURTS: adaptation to non-tribal areas, difficulties of, 304-5; appeals, systems, 306-7; Barotseland, 459-60; Belgian Congo, *centres extra-coutumiers*, 525; French, Belgian, and British systems contrasted, 307-8; Gambia, 483; Kenya, 389-90; modifications of traditional systems, 304-5; Nigeria, 420-1, 431-3; procedure in, contrasted with European, 297-8; procedure, need for simple rules, 309; records of proceedings, 306; Sierra Leone, 481; S. Rhodesia, 380-1; 'statutory' offences, problems involved, 303-4; summary and conclusions, 1643-4; supervision, different policies, 305-6; system, advantages of tribal basis, 302-3; urban areas in S. Rhodesia, 512.

penalties: 309-15; African customary, 309-10; collective punishment, 315; corporal punishment, 312-13 (*see also under territories*, judicial system); disadvantages of European in Africa, 309-10; disadvantages of imprisonment, 310; substitution of fines for compensation, difficulties, 314-15; summary and conclusions, 1643.

prisoners, discharged: 313-14; treatment, 310-12; women, treatment, 313.

probation system, need for study, 310.

problems presented, 294-308, 1612, 1643-4.

professional advocates, objections to their employment, 299.

professional magistrates, controversy over, 300-2.

Justice, administration of (*cont.*)

summary and conclusions, 1643-4.

tribunaux indigènes in French dependencies, variety of customs, 527.

Union of S. Africa, 281-4.

witchcraft and magic, 295-6.

Justice, administration of, *see also under territories*, judicial system.

K

Kabaka: authority of, in Buganda, 24; land agreement with British East Africa Company, 759; land control defined by Agreement (1900), 760; *see also under* Uganda, Buganda.

'Kaffirs', position in S. Africa, 346.

Kakura language, 88.

Kalahari desert: 4; language area, 82; Livingstone's theory of lake in, 1035; proposal, 1036.

Kamasia people: erosion control, 1097; erosion in reserve, 1095.

Kamba people: description of, 28; erosion—control measures, 1098-9;—in reserve, 1070, 1095-6, 1098; initiation ceremonies, 24; land tenure system, 836; overstocking in reserve, 1096.

Kano, Emirate: Hausa centre, 28; non-tribal residents of Sabon Gari, 496; *see also under* Nigeria.

Kanthack, F. E.: cultivable soil area in S. Africa, calculation, 1027; Tanganyika water rights, recommendations, 1045.

Kanuri language, 74, 92, 94.

Kanuri people, description of, 28.

Karanga language group, 85.

Kasanvu, compulsory native labour, paid (Uganda), 615.

Katikiro, Prime Minister, Uganda, 447.

Katsina, Emirate, Hausa centre, 28; *see also under* Nigeria.

Kavirondo people: labour migration of, 702; land tenure system in Kenya, 831.

Kennedy, J. D.: forest flora of S. Nigeria, publication, 1010; gall bug pest studied, 1017.

Kenya.

Abyssinian refugees, 1446.

AGRICULTURE:

crops: awned bulrush millet, 949;

cashew nuts, native cultivation, 917;

coffee—European production, 923;

Kenya—Agriculture (*cont.*)

—exports, 1391;—varieties, 923; cotton—breeding, 949;—ginneries in operation, 903;—native cultivation, 903; groundnuts, native cultivation, 897; Madagascar butter beans, 949; maize—exports, 1391;—improvement experiments, 892;—native production, 892;—pool, Kenya Farmers' Association, 1469–70; potatoes, native cultivation, 889; pulses, native cultivation, 900; pyrethrum, European cultivation, 919; rice, native cultivation, 894; sesame, native cultivation, 899; sisal—European production, 926;—exports, 1391; sorghum, native cultivation, 893; sugar—European production, 929;—Indian production, 929; tea—European cultivation, 924;—exports, 1391; wattle, native cultivation, 890; wheat—pool, Kenya Farmers' Association, 1469–70;—Sale Ordinance (1930), 1391;—subsidy, 1391.

debt: extent of, 821–2; measures for alleviation of, 821–2.

education: native training facilities, 966–7; schools, 967.

European: coffee, 923; co-operation, 1469; essential oils, 919; exports exceed native, 919; extent, 919; government assistance, 821–2, 1391; Kenya Farmers' Association, organization, 1469–70; marketing co-operation, 1469; principal products, 919; sisal, 926; sugar, 929; tea, 924; wheat, 921–2.

expenditure on, 1440.

Indian, sugar, 929.

livestock: cattle—British dairy herds, 931;—death, failure to report, 660;—meat industry, 939;—squatter-owned, 755; culling—in Kamba reserve, 1098;—Land Commission's recommendations, 973; dairying—butter, European production, 943;—butter, levy and export bounty, 1391;—cheese, European production, 943;—ghee, native production, 943; dipping, provision for, 974; disease, East Coast fever, epidemic, 1079; fencing, compulsory scheme, 974; government farm, 949; hides and skins, 940; limitation, 1097; over-

Kenya—Agriculture (*cont.*)

stocking in reserves, 1095–6; pigs, bacon and ham factory, 939; sheep, breeds introduced, 931; stock-breeding work, 976; veterinary training of natives, 978; wool, European production, 941.

manure: compost factory, 963; compost system, 1066.

native: cash crops, effect on land tenure, 848; co-operation, possibilities of developing, 1473; government's development policy, 966–7; livestock, overstocking, 882–3, 1094; marketing, Crop Production and Livestock Ordinance, provisions, 1422.

organization: coffee, 923; sisal, 926; tea, international control scheme, 924; wheat, 922.

pasture land, reconditioning, 1097–8.

pests, coffee, 923.

research: 949; coffee, agricultural officers appointed, 949; East African Agricultural Research Station, Amani, centre for, 955 (*see also under* British East Africa, Amani); pasture, 972–3;—Naivasha station, 1618; Scott Laboratory, work, 949; sisal, 926; veterinary, 949; wheat breeding, 949.

squatter labour, 754–5.

veterinary laboratory work, attempt to centralize, 1203.

Arbor Society, anti-erosion propaganda, 1110.

aviation, *see under* Kenya, transport.

Banks, Land, 1469.

Bantu inhabitants of, 22.

Berlin Act, includes, 1341.

Broadcasting, station and programmes, 1299.

Capital: investment, 1318, 1391; public listed, 1319.

Census in, 115.

Civil service: Asiatic—employment, 233;—local service established, 234; Chief Native Commissioner, 227; conditions of service, 225; local service—conditions of service, 234;—constituted, 233; recommendations for reorganization, 229–30.

Climate of Mt. Kenya, 11.

Coastal areas, land tenure, native confusion of titles, 850.

Kenya (*cont.*)

- Conflict of interests in, 142.
- Concessions, mining, 1499.
- Constitution: closer union question, 167, 182-5; Dominion status question, 137, 251; East African federation proposed, 181-2.
- Convention of Associations in, 166.
- Co-operation: European, 1469; native, 1473.
- Customs: duties, 1391;—union with Tanganyika and Uganda, 184.
- Digo district: helminth infection, detailed study, 1147; medical survey, 116.
- Discharged prisoners in, 313-14.
- Economic system: agricultural character, 1391-2; Economic Development Committee, trade balance investigated, 1350; free trade established, 135; tariff basis changed, 1342.

EDUCATION:

- Arab, separate schools, 317.
- Councils administering, 1238.
- European: 1260; library provision, 1292-3.
- expenditure, 1440.
- Indian, 338-9, 1260.
- native: advisory body, composition, 1239; district boards, functions, 1239; erosion control, 1110; female, 1256; finance, native contribution, 1240; intelligence tests, experiments, 39-40; language policy, 1258-9; medical subordinate staff, 1189-90; Medical Training Depot, Nairobi, 1189; native demonstrators, training, 966-7; schools—Jeanes, Kabete, 1252;—native councils foundations, 1240;—native independent, 1240;—trade, Native Industrial Training Depot, 1246; secondary, 1243; teachers, training facilities, 1251; urban areas, facilities, 517; vocational, 1246.
- Erosion: control measures, 1068, 1094, 1097-8; desert conditions, 1094, 1099; extent, 1093; Land Commission's control recommendations for Ukamba Reserve, 1098; native reserves—control measures, 1096-7;—and increase of, 1094-6; sheet and gully, 1093-4; soil loss, 1058, 1095; squatters' stock as cause of, 1094; wind in north-west, 1059.
- European settlers: 1390; attitude to

Kenya—European settlers (*cont.*)

- labour supply, 640-1; industry assisted by government, 385-6; influence on economic policy, 385-6; influenced by policy of Union of S. Africa, 132; opposition to income tax, 550-1; outlook, 383-4.
- Export bounties and subsidies: butter levy, 1391; cashew nuts, monopoly, 917; wheat, 1391.
- Exports: agricultural, co-operative, 1470; bacon and ham, 939; beans, 900; butter, 943; cattle, 939; coffee, 923, 1391; decline in value, 1328; goats, 939; gold, 1391; hides and skins, 940; to Japan, 1337-8; maize, 1391; rice, native-grown, 894; sesame, seed and oil, 899; sheep, 939; sisal, 926, 1391; sodium carbonate, 1391, 1499; sugar, 929; surplus, 1350; tea, 1391; timber, 997; wheat, 921-2; wool, 941.
- FINANCE, PUBLIC: budget, compilation, 1440; Commission of Inquiry, 1440; debt, 1441;—charges, 1350; expenditure, 1432, 1440-1;—pensions, 1350;—roads, 1557; income tax and native policy, 138; licences revenue, 1461; loan, redemption, 1324; mining revenue, 1461-2; Moyne Report on, 386; native tax revenue, 1458; non-native direct tax revenue, 1459; racial contributions and benefits, 1457-8; railway debt, 1441, 1582; railways, 1583-4; revenue, 1440-1;—estimates (1937), 1441; royalties, revenue, 1461; subsidies—Imperial Airways, 1601;—wheat, 1391.
- Forests: area, 997; deforestation, 1095; economic exploitation, 985, 997; forestry staff, 997-8; investigation, progress, 1011; native destruction, 997; reafforestation—Kamba Reserve, 1098;—native lands difficulty, 997; reserved areas, 997; *taungya* system adopted, 997; wattle planting, 997; working plans, 1011.
- Franchise qualifications, 166; *see also* under Kenya, Indian franchise.
- government: executive council—composition of, 166;—constitution of, amended, 169;—Indian membership, 166;—native representation, 166; legislative council, 164;—Arab representation, 317;—composition, 164;—

Kenya—government (*cont.*)

constitution revised, 165;—Indian representation on, 164-6, 169, 336, 338;—native representation, 168, 169-70;—settlers and representation on, 164;—unofficial majority question, 168-9; local municipal councils and urban native, 517-18; representative institutions and indirect rule, problem of reconciling, 1640; self-government demand, 167-9; unofficial opinion consulted, 166-7.

Governor of, and labour recruitment question, 640-1.

HEALTH AND MEDICINE:

disease: helminths, detailed study, Digo district, 1147; typhus, louse, prevalence, 1137.

dispensaries system, 1166.

health services: expenditure, 1166, 1440; Indians, provision, 328; Medical Department's progressive policy, 1165-6; native subordinate staff, training, 1189-90; organization and staff, 1165-6; urban natives, facilities, 517.

hospitals: accommodation and patients, 1165, 1166; mental, 1151.

missionary work, 1117, 1165.

research: anti-plague inoculation, 1136; institutions, 1161; mental disorders, 1151; nutrition, 1618; Oxford University Social Studies Committee, 1620; Research Laboratory, Nairobi, 1165.

Housing, urban native accommodation, 516-17.

Import duties: butter, 1391; customs union with Uganda and Tanganyika, 1344-5; flour, 1391; revenue from, 1440; sugar, 929, 1391; wheat, 1391.

IMPORTS: cotton piece goods, sources, variation in, 1336; government, 1339-40; Japanese — percentage, 1337; —and products, 1336-7; proportion—British African, 1335;—and different, 1334; timber, 997; value per head of population, 1334.

Imports and exports, freightage rates, 1609.

Indian franchise question: 164-6; common electoral roll, 165; recent developments, 169; white settlers' attitude, 165; Wood-Whiterton proposals for electoral roll, 165.

Kenya (*cont.*)

Indian question in, 335-40.

Indians, trading activities, 1422.

Judicial system: Arabs subject to non-tribal courts, 317; judicial functions, exercise of, 300-7; native courts—appeals from, 288;—composition and jurisdiction, 389-90;—constitution under Native Tribunal Ordinance (1930), 389-90, 518;—traditional chiefs excluded, 287; penalties, collective fines for stock theft, 385; urban native and native tribunals, 518.

Kabete: Scott Agricultural laboratory at, 949; veterinary laboratories, proposed development as E. African centre, 957.

Kavirondo Reserve: erosion in, 1095; land tenure, subdivision of holdings, 850.

Kiambu district, land tenure, native, sales recognized, 849.

Kikuyu Central Association, press activities, 1296.

Kikuyu Land Tenure Committee, Kiambu district system described, 849.

Kikuyu: land tenure customs examined by government committee, 838; political organization of, 23.

Kitale coffee factory, 923.

Labour, native: Commission on (1912), evidence, 640; Commission (1912-13) and recruitment by taxation, 639; communal labour, 610;—road-making, 612; compulsory—regulations, 615, 618-19;—road-making abandoned, 1556; employees, numbers, 607, 676; farm recruited, 385, 651; 'foreign contract', regulations, 658; migration, 702; Northey circulars, 641, 645; offences, statistics, 662; private employment—recruiting by officials, question, history of, 640-2;—recruitment organizations, 654; registration system, 669-70; Rules (1907), recruitment provisions, 640; wage determination, provision for, 695; welfare, 676.

Lake Rudolph, recession and erosion, 1059.

LAND:

acquisition prior to Protectorate, 742.

alienation: European farm holdings, 1390; European settlement, extent and reasons, 820-1; Highlands, 754;

Kenya—Land (*cont.*)

- mining areas, 754; native grievances, 745; from native reserves, 748;—Central Board to control, 824;—regulations and procedure, 823-5; regulations governing, 744; by state, terms, 825, 826.
- Arab tenure, 317.
- British policy, 754.
- Closer Union Commission's recommendations, 749, 753-4.
- Crown: definition, 743-4, 747; regulations for grant, 744; reserves defined as, 748.
- Highlands: area delimited, 750-1; white area, 743, 754.
- Indian tenure question, 336-7.
- Land Board (1904), 746.
- Land Commission: land purchase of Kiambu Kikuyu described, 849; mining rights in reserves, recommendations, 752; recommendations, 747, 749-50; reserve administration, recommendations, 752-3.
- laws, regulating ownership, term 'native' defined, 828-9.
- leases: duration question, 746-7; grant, conditions governing, 753-4.
- Masai grievances, 745-6.
- mineral rights, 1519-20.
- mining rights in native reserves, 751-2.
- native: expropriation, 745; mineral prospecting, regulations, 1521-2; occupation protected, 744; reserves—administration, Land Commission's recommendations, 752-3;—alienation to white settlers, 747;—area, 748, 749-50;—area and inquiry by Land Commission, 749;—conditions in, 706;—Crown lands, 748;—Crown tenant status in, 748;—delimitation, 745, 747, 748;—development work and expenditure, 813;—erosion in, 1070, 1094-6;—exclusion for development, conditions, 753-4;—labour reservoirs, 707;—leases, recommendations as to grant, 753;—legal ownership of, 823;—mining areas in, conditions governing, 754;—mining areas excluded from, 752;—mining rights in, 751-2;—Native Lands Trust Board advocated, 749, 752-3;—need for expansion, 750-1;—overstocking problem, 811-12;—policy: initiated, 745;—popula-

Kenya—Land (*cont.*)

- tion congestion, 750;—population density, 748, 811;—soil deterioration, 811;—tenure, in perpetuity, 749;—water supply, 1042-3; rights, definition, 747.
- occupation, certificate, 742.
- racial discrimination: in acquisition, 747; in allocation, 754.
- sovereignty, question under Protectorate, 742.
- speculation, 746.
- squatters: control regulations, 755; problem, 754-5.
- unoccupied: native claims, 745; regulations for disposal, 744.
- white settlement area, 751.
- Land tenure:
 - European, terms, 820-1.
 - individual, development, 868.
 - native: acquisition of proprietary title, 850-1; customary—Bantu customs studied, 838;—changes, 848-51;—examination by government committees, 838-9;—permanent demarcation increasing, 850-1;—practice of sale increasing, 849-50; individual—law, case, 747-8;—provisions, 750; Land Titles Ordinance (1908), titles established under, 850; leasehold, 753; reserve policy recommended by Land Commission, 850-1; reserves, in, 748; subdivision of holdings, extent, 850; system of Kavirondo and Kikuyu, 831.
- Language: 88; Inter-Territorial Language Committee, 90.
- Law: differential legislation, forms of, 384-5; water rights, 1043.
- Legislation: Co-operative Societies Ordinance, provisions, 1469.
- Libraries, 1292-3.
- Machakos reserves, land tenure, individual holdings, 850.
- Marketing, Coffee Board, 923.
- Markets, native, 1421.
- Meteorological service, 15.
- Minerals: gold production, 1499; prospecting, native lands, regulations, 1521-2; rights, ownership, 1519-20; sodium carbonate production, 1499.
- Mines: concessions policy, 1499; Department, 1499; disability compensation, 676; gold—development, 1498-9;—production, 1499; leases, con-

Kenya—Mines (*cont.*)

- ditions for grant, 754; native labour conditions, 676; regulation, 1522, 1526; revenue contribution, 1461-2; rights in native reserves, 751-2; Tanganyika Concessions, prospecting application, 1499.
- Missions: educational work, native differences, 1240; medical work, 1117.
- Mombasa: coffee factory, 923; dialect, 90; urban native locations in, 517-18.
- Nairobi: coffee factory, 923; Mathari mental hospital, 1151; medical research conference at, 1203-4; Medical Research Laboratory, anti-plague inoculation, 1136; municipal council, native affairs committee, 517; native council in, 518.
- Naivasha, government livestock farm, 949.
- Nandi people of, 29.
- NATIVE ADMINISTRATION: 382-93;
 - agriculture: native coffee growing discouraged, 386; Native Grown Coffee Rules introduced, 386.
 - Chief Native Commissioner, 227, 393.
 - Closer Union Commission's recommendations, 168.
 - 'de-tribalized' native, problem, 170.
 - differential legislation, reasons for, 384-5.
 - direct rule, reasons for adoption, 533.
 - economic and social policy developed, 386.
 - educated natives, position of, 532.
 - government policy: memorandum defining, 386-7; stages in, 387-91.
 - Imperial Parliament and, 135-6.
 - Joint Committee on Closer Union, recommendations, 393.
 - judicial system, *see under* Kenya, judicial system.
 - labour-tenant, status of, 384-5.
 - marketing of produce, special legislation, object, 385.
 - native authorities, extent of, use of, 386.
 - Native Betterment Fund, recommendation, 386.
 - native councils: constitution, 391-2; educational work, 1240; erosion-control work, 1096-7, 1098; health work, 1166; powers compared with Union, 391; rate imposed by, 571; resources compared with Tanganyika and Nigeria, 392; revenue, 390; value of, discussed, 392-3.
- Native Labour Commission (1912-13) recommendations, 393.
- native organizations, measure of self-expression, 393.
- organization: chiefs, traditional, use made of, 387-9; headmen, appointment and functions, 387-9; judicial, 389-90; local government, native councils, position of, 390-1; official government, 393.
- policy: 383, 532-3; influence of European and non-European settlers on, 383-4.
- public opinion and native courts, 390.
- segregation advocated, 167-70.
- 'squatter' system, restriction of, 384-5.
- stock theft, measures to prevent, 384-5.
- summary and conclusions, 1645.
- taxation, headmen, increasing use of, 388.
- traditional institutions, government view on, 386-7.
- urban natives: control of, 385; education facilities, 517; housing provision, 516-17; locations, revenue of, 517; medical and welfare facilities, 517; municipal government, 517-18; Nairobi council, 518; nature of the problem, 516; recreation facilities, 517; residential regulations, 516.
- vagrancy, measures against, 385.
- North Kavirondo Reserve, land tenure customs, examination, 837, 839.
- Northern Frontier Province, people of, 29.
- Nutrition, special inquiries, 1124.
- Population: 105; Chief Native Commissioner's estimate, 115; density in reserves, 748; enumeration system, 115-16; European, 1390; Indian community, 335; Mombasa, 115; Nairobi, 115; non-native census, and classification, 117; trends, 116.
- Postal service, joint service with Uganda, 184.
- Press, vernacular publication, 1295.
- RAILWAYS: administrative reorganization, 1583; agreement with Tanganyika railways, 1580-1; agricultural produce rates, 1391; co-ordination with Tanganyika, suggestion, 1581; cost, constructional, 1582; development,

Kenya—Native Administration (*cont.*)

Kenya—Railways (*cont.*)

1582, 1604; finance, 1441, 1582, 1583-4, 1605; freightage rates and exports, 1609; friction with Uganda interests, 1582-3, 1608; goods traffic and rates, 1583-4; Government Department, 1582; High Commissioner of Transport, 1583; inquiry and recommendations, 1583; Kenya-Uganda line (1897), 1390;—and its finance, 1447; lines, main and branch, 1382; policy, uncommercial use, 1608; Railway Advisory Council, composition and functions, 1583; slave trade, influence on construction, 1582; system, joint, with Uganda, 1582.

Rainfall, 1042.

ROADS: communal labour on, regulations, 612; cost, 1556; expenditure, 1557; experimental work, 1557; mileage, 1557; native construction, 1556-7; Public Works Dept. control, 1557; surface used, 1556; transport on, control recommendations, 1557.

Social studies: co-operative research project, 52-3; Oxford Social Studies Research Committee, finance, 1621.

Squatters, *see under* Kenya, labour, land.

Suk, people of, 29.

Survey: aerial, mining purposes, 1499; cadastral, 8; geologist, official appointment, 1517.

TAXATION:

Asiatic, 339.

comparative racial contribution to services, 339.

incidence per head, estimate, 1463.

land, Colonial Office proposal, 821.

native direct: age of liability, question of raising, 573-4; collection system, 572-3; default, penalties, 571-2; defaulters, lists, 572; exemption, 571;—Native Taxation Report recommendations, 573; female liability, 571; graduated tax, Lord Moyne's proposal, 574; hut and poll tax—combined, 570;—rate, 570-1;—revenue, 1440-1; hut tax—abolition proposed, 574;—imposed, 570;—on women, question of hardship, 574; increase disproportionate to non-native, 530-1; inquiry, 1614; local rate—proposal, 574-5;—rate and

Kenya—Taxation (*cont.*)

liability, 571; payment by instalments, 571; poll tax, 570;—suggested, 574-5; registers of taxpayers, compilation, 572; revenue from, 572, 1458.

non-native direct: Colonial Office stipulates increase, 550; history of, 550-2; income tax—conditions for settlers' acceptance, 169;—introduction, 549;—opposed by settlers, 550;—provisions for (1937), 551-2; poll tax, 550;—rates, 550-1;—revenue from (1937 estimates), 1441; recommendations by Sir A. W. Pim, 551; revenue from, 1459; special levy for education (1927), 551; systems discussed, 553-4.

Taxpayers' Protection League formed, 552.

Trade: balance, 1350-1;—civil service cost as affecting, 1351; native marketing control and Indians, 340; racial statistics of persons engaged in, 1422; transit, Tanganyika exports, effect on, 1330-1; with non-British territories, Congo zone, 1343.

Transport:

air: aerodromes maintained, 1600; gold carried, 1603; Imperial Airways subsidy, 1601; total expenditure, 1601; Wilson Airways, local service, 1600.

co-ordination committee, 1557.

Tsetse-fly, control measures, 1131.

Water supply: boreholes, drilling and expenditure in native reserves, 1042-3; dams, construction, 1099; drinking-water supply, 1042-3; irrigation—native system, 1042;—Perkerra river scheme, 1042;—Tana river scheme, 1041-2;—West Suk district system, 1042; native reserves and deficiency of, 1042-3; rivers diminished, 1062; shrinkage, 1094; water rights, legislation governing, 1043.

White Settlement, 7, 742-3.

Witchcraft and magic, law on, 296.

See also under British East Africa.

van der Kerken, M., land tenure, native rights in Belgian Congo, studied, 841.

Kew, Royal Botanic Gardens, *see under* Great Britain.

Kgotla, native council: position and powers, 457; representation on Educa-

Kgotla (*cont.*)
 tion Board, 1239; *see also* under High Commission Territories, native administration; N. Rhodesia, Barotseland.
 Khama, applies for British protection in Bechuanaland, 403.
 Khoisan language group, 75.
 Kibanja land tenure system in Bunyoro, report on, 899.
 Kikuyu grass in Kenya, 1068.
 Kikuyu language, 88.
 Kikuyu people: erosion control measures, 1096-7, 1098-9; initiation ceremonies, 24; labour migration of, 702; land tenure customs, 831, 835;—githaka system—developments, 849;—government committee on, 838;—modifications in, 848-9;—purchases of land from Dorobo, 849; marriage customs, 929; political organization of, 23.
 Kilo-moto mines, *see* under Belgian Congo, industrial concerns (*Société des Mines d'Or de Kilo-Moto*).
 Kimvita language, Swahili dialect, 90.
 Kinghorn, A., trypanosomiasis research, 1130.
 Kingsley, Mary: emphasizes need for wider knowledge of African life, 40-1; health conditions and work in Br. W. Africa, criticisms, 1120; Royal African Society, memorial to, 51; Sierra Leone house tax criticized by, 587-8; supports policy of Sir G. Goldie, 133.
 Kingwana language: 79, 90; standard form developing, 96; Swahili dialect in Belgian Congo, 95, 1275.
 Kipande, work card, in Br. E. Africa, 654.
 Kipsigis-Nandi language, 88.
 Kirby, Prof. P. R., native music studied, 1291.
 Kisese, Kamba land tenure system, 850.
 Kitchen, Dr. S. F., yellow fever preventive inoculation, 1129.
 'Kitchen Kaffir' dialect, 86.
 Kitson, Sir A., mining concessions in Kenya, recommendation, 1499.
 Kiunguja language, 90.
 Kleine, Prof. F. F., trypanosomiasis research, 1130.
 Klingenhoben, Professor, linguistic scholar, 72.
 Koch, Dr., trypanosomiasis investigations, 1120-1.
 Kololo language, 86.
 Konde language, 87, 88.

Kongo language: 79, 95, 96; commercial use, 96; use in Belgian Congo, 1275.
 Kono-Vai language, 95.
 Koranic *ushur*, cultivation tax in N. Nigeria, 771.
 Korekore language, 85.
 Krobe people, land ownership acquired, extent, 828.
 Kroeber, Professor, study of comparative mental capacities, 36.
 Kropf, Dr., philological scholar, 68.
Kru Proverbs, by Prof. M. J. Herskovits, 73.
 Kuczynski, Dr. R. R.: population data considered by, 124-5; studies by, 107.
 Kwa language group, 76.
 Kyiga language, 88.

L

Labour, native.

Administrative supervision in British areas, defects, 679.
 Agricultural conditions in Union of S. Africa, 673.
 Agriculture affected by demand for, 885, 979-80.
 Casual, health control problem, 1199.
 Civilized labour policy: in S. Rhodesia, 378, 689-91; in Union of S. Africa, 682-9.
 Colour bar policy: on N. Rhodesian railways, 691; in Union, 688.
 COMMUNAL: administrative use, 608, 611-13; African system compared with England and France, 612; agricultural production, British dependencies, 631; agricultural service dues to chiefs, 881; chiefs' rights—commutation, 610-11;—under Geneva Convention (1930), 611;—use, 609-10; regulations governing, 609-11, 612-13; traditional use, 608-11.
 COMPULSORY:
 agricultural: 630-5; Belgian dependencies, 633-4;—views, 630; British dependencies, 631-2;—views, 630; criticisms, 634-5; French dependencies, 632-3;—views, 630; justifications for policy, 630-1; Portuguese colonies, 635; system discussed, 634-5.
 British policy, 616-17.
Charte Coloniale and, 644.
 decrease in demand, 615.
 economic and humanitarian aspects, 628.

Labour, native—compulsory (*cont.*)

- 'educative' cultivation, 629.
- employment and regulation, 613-16.
- famine precaution, 629.
- Forced Labour Convention, (1930):
 - portage, *see under* Labour, native;
 - provisions and ratification, 617, 628-9.
- gradual abolition, 620.
- Joint Parliamentary Commission (British) recommendations, 617.
- legislative restrictions, 629-30.
- Natal Native Code, provision for, abolished, 614.
- Nyasaland concessionaries claims, 756.
- railway construction by, 613-15.
- regulation, 616-24.
- remuneration, 613.
- Slavery Convention's definition, 628.
- summary and conclusions, 1647-8.
- Contract: 'foreign contracts', regulation of, 658; short and long term, 693; system, defects, 678-9.
- Craftsmanship, difficulties of instruction, 1426-7.
- Crops, cash, production and supply of, 1394.
- Curfew rules: in Natal, 667; in S. Rhodesia, 667.
- Diet and living conditions, regulations, 1199.
- Dietaries: prescribed by law, Belgian Congo, 1124; special study, Rand, 1124.
- Disablement compensation: in Fr. W. Africa, 680; in Nigeria, 677; in S.W. Africa, 674; in S. Rhodesia, 674; in Tanganyika, 676; in Union of S. Africa, 674.
- Educational, in Portuguese colonies, 650.
- Efficiency: health question, 697; machinery and enhancement of, 697; need for improvement, 696-7.
- Emigrant, Committee on, Nyasaland, 648.
- Employees, defects in statistics, 607-8.
- Employment: necessity of, 706; restrictions, summary and conclusions, 1648.
- European agriculture dependent on, 918.
- European employment, S. Rhodesia, 1380.
- Female, regulation in Union, 673.
- Forced Labour Convention (1930), 628-9.
- Health: interest of industrial concerns,

Labour, native—Health—(*cont.*)

- 1194; safeguards in French dependencies, 644.
- Hours of work, regulation in Union of S. Africa, 673.
- Immigrant, convention between Union of S. Africa and Portugal, 652-3.
- Incentives to, 648-9.
- Industrial employment: capacities, 1427-8; education possibilities, 1427-8.
- International Committee of Experts on Native Labour, *see under* League of Nations, International Labour Conference (1935).
- Juvenile: conditions in Tanganyika, 677; regulations in Union, 673.
- Labour Departments, need for, 679.
- Masters and Servants Acts, reform needed, 698.
- MIGRATION: 1361; Belgian Congo, 702-3; Br. W. Africa, 702; control measures, 707-9; disease spread by, 1144, 1149-50, 1199; effect of taxation on, 594, 605, 703-9; extent of—Basutoland, 700-1;—Bechuanaland, 700;—French dependencies, 703, 705;—Kenya, 702;—N. Rhodesia, 701;—Nyasaland, 701-2;—Portuguese colonies, 703, 705;—S. Rhodesia, 701, 1380;—Swaziland, 700;—Tanganyika, 702;—Uganda, 702;—Union of S. Africa, 700; miners, tuberculosis spread, 1149-50; Nyasaland Emigrant Labour Commission's recommendations, 679; policies suggested, 705-7; population question and, 129; problem and treatment, 648-9, 699-709; recruitment regulations, 707-8; research into effect needed, 1613-14; rest camps, provision, 658; S. Rhodesia and immigrant labour, 701, 1380; statistics unreliable, 679; taxation of, 600-1; venereal diseases spread, 1144.
- Military conscripted labour: in Belgian Congo, 627; in French dependencies, 627-8, 643.
- Miners: measles, susceptibility to, 1151; pneumonia prevalent, 1150-1; silicosis incidence, 1148-9; tuberculosis, 1139.
- Non-migrant population, taxation of, 600.
- OFFENCES: categories, 660; contract

Labour, native—Offences (*cont.*)

breaches, Committee on Native Labour, recommendations, 663-4; penal sanctions, 659-64;—differential operation, 663-4;—need for revision, 664;—operation compared with non-African countries, 662;—reasons for, 662-3.

Organization for protection, 698.

PASS LAWS: Cape Province, 666; identification card system in French dependencies, 671; inquiries into in Union, 668; Kipande system in Kenya, 669; Natal, 667; 'native card' system in Portuguese colonies, 671; Nyasaland, 670; Orange Free State, 665, 666-8; passport system in Belgian Congo, 671; reform needed, 698; registration—in Kenya, 669-70;—in N. Rhodesia, 670; scope and development in S. Africa, 664-5; S. African Pass Law (1809), terms, 664; S.W. Africa, 668-9; S. Rhodesia, 669; Tanganyika, 670-1; Transvaal, 665, 666-8; Union of S. Africa, 665-6;—Native Economic Commission's criticisms, 668; uses and abuses, 671-2.

Policy: in Belgian Congo, 692; in French dependencies, 692.

Porterage: cost per mile, 1540; legislative restrictions, 629-30; modern transport, effect on, 1538-9; motor-car substituted, 1129.

Prestation, see under Labour, native and non-native.

Prison, employment of, 310-12.

PRIVATE EMPLOYMENT:

contract labour, transport regulations, 657-8.

evolution of present position, 635-51.

Geneva Convention on Recruiting of

Indigenous Workers, provisions, 656.

historical development: 635-6; in Union of S. Africa, 636-9.

mining, recruitment, early stages, 651.

plantations, recruitment, early stages, 651.

recruitment: Belgian Congo, history, 644-8; British dependencies, history, 539-43; French dependencies, 643-

44; improved conditions, 655; officials and, question in British dependencies, 640-3; organizations—Belgian

Congo, 655;—Br. W. Africa, 655;—expenses of, 655;—Kenya, 654;—N.

Labour, native—Private Employment (*cont.*)

Rhodesia, 654;—Portuguese colonies 651-2; S.W. Africa, 653;—S. Rhodesia, 653-4;—Union of S. Africa, 651-2; present position of administrations, 648-51; private organizations and, 651-6; regulation of, 651-9; rules, 656-8;—Belgian Congo, 656;—British dependencies, 656;—Fr. W. Africa, 657;—Portuguese colonies, 657;—Union of S. Africa, 656; state agencies abolished, 651; system—future discussed, 658-9;—still required, 651; *see also under* Labour, native (recruitment).

Problems of: 605-6; summary and conclusions, 1647-8.

Rand mines, special problems, 499.

RECRUITMENT: Assam tea plantations, 651; Belgian Congo, Advisory Committee on, 646; Ceylon tea plantations, 651; compulsory, 603; farm labour in Kenya, 385; Fr. Indo-China, 651; Portuguese colonies, 638-9, 650; Rand mines, 652, 693; reform needed, 698; regulations—importance of vital statistics, 1639;—migration, attempts to check by, 706;—restrictive, 707;—summary and conclusions, 1647; Ruanda-Urundi, by *Union Minière*, 645; taxation as means of—British dependencies, 639-40;—Union of S. Africa, history, 637-8; Temporary Slavery Commission on, 648; Union of S. Africa, present position, 639; *see also under* Labour, native (private employment).

Registration in S. Rhodesia, 669.

Reserves as source of supply, 804-5.

Resident in urban conditions, conclusions, 1648.

Roman Catholic Missions on, in Belgian Congo, 647.

Sale of, importance in native economy, Union of S. Africa, 1409.

Skilled employment: 692; engine-drivers, 1581, 1586; training, Belgian Congo, 1275.

Slavery, influence of, 636.

Social services for: 709-11; urban areas and locations, 711.

Subsistence economy and capitalist enterprise, 604-5.

Supply: 692-3; conditions influencing,

Labour, native—Supply (*cont.*)

693-7; deficiency, 603; economic development and, 1311; summary and conclusions, 1647-8.

Surveys in Belgian Congo, 645-7.

Tax: Cameroons under German administration, 591; defaulters as unpaid labourers, 620-1; influence discussed, 594; payment by unpaid labour, 620-1; supply by means of, 596.

Technical education, 695-6.

Trade unions, question of formation, 698.

Tsetse control by, Br. E. Africa, 1132.

Vagrancy, control of, in Kenya, 385.

Wages: determination—civilized labour policy and effect on, 686;—provisions for, 695;—Tanganyika Committee's recommendations, 695; earners, numbers, 606-8; importance in economic system, summary and conclusions, 1658-9; mining development based on low level, 1534; N. Rhodesian rates, 691-2; reduction by depression, 693; supply influenced by, 695-6.

WELFARE: British policy, 678-9; Cameroons, Br. Mand., 678; capitation fees for, in Portuguese colonies, 650; Gold Coast, provision for, 678; Kenya, 676; Nyasaland, 676; regulations—Belgian Congo, 680-2;—Fr. W. Africa, 680;—Nigeria, 677-8;—N. Rhodesia, 675-6;—Portuguese colonies, 674-5;—S. Rhodesia, 674-5; rest camps for migrants, 658; Ruanda-Urundi, 680; state intervention, extension recommended, 698; state responsibility, 710-11; Tanganyika supervision, 676-7; Union of S. Africa, 672-4;—Labour and Social Welfare Depts., 672.

Labour, native and non-native:

Prestation: commutation, 552;—Togo, Fr. Mand., 522; form of taxation, 588-9; French dependencies, 624-6; Portuguese colonies, 623-4.

Wage determination in Union, 682-9. Wages, S. Rhodesia comparative rates, 689-90.

Labour, non-native.

Asiatic, indentured Indian labour in Natal, 603.

Chinese imported into Union of S. Africa, 638.

Labour, non-native (*cont.*)

European: native as competitor of, 543-4; wage rates in Union, 683; welfare work among, in Union, 672.

Indian, indentured labour: Natal, 319-20, 326, 838; strikes, 322.

Indian unskilled labour, 326.

miners, silicosis incidence, 1148-9.

Poor White question in Union, 684-6; *see also under* Union of S. Africa, poor whites.

Labouret, H., French linguistics scholar, 72. de Lacerda, José, explorer, 1310.

Lacustrine Bantu, religion, basis of, 25-6.

Lacustrine kingdoms, origin and organization, 23-4.

Laibon, religious leader of Masai, his duties, 439.

Laigret, Dr. J., yellow fever vaccine, 1129.

Lake Albert, transport service, 1542-3.

Lake Chad: 74; area surveyed for artesian water supplies, 1047.

Lake Edward, connexion with Lake Albert, 1543.

Lake Kioga, transport service, 1542.

Lake Kwanja, transport service, 1542.

Lake Nyasa: position, 3; steamer service, 1541.

Lake Tanganyika, steamer service, 1541-2.

Lake Victoria Nyanza: population density around, effect on land tenure, 835; population evacuated as trypanosomiasis control measure, 1131; position of, 4; sleeping sickness epidemic, 1129-30; steamer service, 1542.

Lakes, Great African, Congo railway company, *see under* Belgian Congo, industrial concerns (*Cie des chemins de Fer du Congo Supérieur aux Grands Lacs Africains*).

Lakes, navigable, 1540.

Laman, Dr. K., French scholar: Bantu phonetics work, 75; work on Congo languages, 72.

Lamba-Luba-Wisa dialects, 85.

Lambeg, Ireland, linen research station, and sisal consumption, 948.

Lambkin, Col. F. J., syphilis in Uganda, report, 1120.

Lamblin, M., compulsory agricultural production, policy, 632.

Lamido, Fulani ruler in Cameroons, 433; *see also under* Cameroons, Fr. Mand., native administration.

Land.

Acquisition: administrative control, 866; native in urban areas in Union of S. Africa, 502.

Alienation: administrative control, 866; to alien natives, control in British dependencies, 827-8; assumption by state of ultimate ownership, effect on native rights, 824-5; by chiefs, their authority, 832-3, 835, 864-5; chiefs' powers assumed by administrations, 801; control measures, 822-9; European conception and African customs, 803; European settlement, Kenya, 820-2;—under free disposal system, Union of S. Africa, 845; legal basis, 798-803; native tenure and right of, 801-2; to non-natives by private purchase—control, Belgian dependencies, 827;—control, British dependencies, 827-9;—control, French dependencies, 827; to non-natives by state—terms, Belgian Congo, 826;—terms, British dependencies, 825, 826-7;—terms, French dependencies, 825-6; by one tribe to another, 836; for political objectives, 814; for purposes other than colonization, problems presented, 822-4; restrictions in S. Africa, 721; state rights of, determination, 802-3; summary and conclusions, 1649-50.

Burning of pastoral, value, 1068.

Carrying capacity, reduction through erosion, 1063.

Colonial policy: comparison with other territories, 713-17; historical outline, 712-13; investigation recommended, 803.

Concession system, 718.

Crown: *see under territories.*

Erosion control measures: cultivated land—cover crops, 1065;—raising humus content, 1065;—strip cropping, 1065;—terracing, 1064; pastoral land—drought-resistant plants, 1068;—grass improvement, 1069;—livestock reduction, 1068-71;—paddock cattle, 1067;—reconditioning, 1068;—reduced burning, 1067-8;—rotational grazing, 1066-7;—tree-planting, 1068; *see also under Erosion.*

Erosion of pastoral, causes, 1066.

Fertility, reduction through erosion, 1663; *see also under Erosion.*

Land (cont.)

Forest reserves, legal basis for, 1022-3; *see also under Forests.*

Irrigated areas, question of rights, 1053.

Jurisdiction, rights of chiefs over, disputed on sale, 828-9.

Laws regulating ownership, term 'native' defined, 828-9; *see also Land, tenure, native, and title.*

Mineral rights: Bechuanaland, 1519; N. Rhodesia, 1519; ownership in territories, 1518-21; *see also under Minerals.*

Mortgage, native views, 863; *see also Land, tenure (native).*

Native reserves: Kenya, conditions and requirements, 811-13; labour reservoir aspect of, 804-5; mineral prospecting regulations, 1521-2; N. Rhodesia, conditions and expenditure, 809-11; policy, problems considered, 813-14; segregation policy and, 804; S. Rhodesian, policy, conditions, and administration, 378, 809; Union of S. Africa—area, 721;—policy and conditions, 805-9; *see also under Native Administration.*

Native rights: and alienation, 798-803; British colonial policy, 799; evolution under contact of civilization, 863-6; French policy, 866; future trends, 863; governmental policy in—Belgian Congo, 790-5;—Cameroons, Br. Mand., 774-5;—Cameroons, Fr. Mand., 788-90;—Congo Free State, 790-2;—Fr. colonies, 782-8;—Gambia, 780;—Gold Coast, 775-9;—High Commission Territories, 728-32;—Kenya, 742-55;—Nigeria, 768-74;—N. Rhodesia, 738-42;—Nyasaland, 755-9;—Portuguese colonies, 796-8;—Ruanda-Urundi, 795-6;—Sierra Leone, 780-2;—S.W. Africa, 725-8;—S. Rhodesia, 732-8;—summary and conclusions, 1649-50;—Tanganyika, 763-8;—Togoland, Br. Mand., 779-80;—Togo, Fr. Mand., 790;—Uganda, 759-63;—Union, 718-25; inquiry needed, 1612-13; protection, 803; recognition, 713.

Ownership: African system of tribal, 799; and alienation question, 801-2; conditions influencing, 717-18; effect of change in sovereigns, 799-800; policy in S. Africa, 718-21; white

Land—Ownership (*cont.*)

settlement influence, 717-18; *see also under* Land, tenure (native).

Private rights: native tenures, customary, 829-36;—and changes in, 842-63; problems of, 863; summary and conclusions, 1649-50; *see also under* Land, tenure (native).

Purchase, native right of, in Union, 721-2.

Settlement, European, in the Union of S. Africa, 814-18.

Sovereignty: Belgian conception, 790-1; in British areas, judicial question, 713-14, 715, 725, 731, 732, 733, 734-5, 739, 742, 759-60, 761, 762, 768, 769, 772-3, 798-9; determination in colonial areas, 798-9; French conception, 782, 784, 785, 789; German conception, 774, 788, 795; Portuguese conception, 796.

Speculation, 872.

'Squatter' system: restriction in Kenya, 384-5; in Union of S. Africa, 724-5.

Survey, cadastral: extent of, in Africa, 959; for registration of title, 876-8; *see also under* Survey.

Tenure, European, form, 863.

TENURE, NATIVE:

administrative: concern with increasing modifications, 829-30; control of changes, 865-6; policy, 863-4.

admission of outsiders, 835.

agricultural: credit, impeded by customary, 1429; improvement and, 837-8; systems and form of, 869-70.

anthropological inquiries, 47.

bases of, in different forms of societies, 830-2.

beliefs associated with, 833-4.

beneficial occupation as pre-requisite, 867.

case law development, 829.

changes in customary: Belgian Congo, 862; Br. E. Africa, 847-53; Br. W. Africa, 853-8; Cameroons, Br. Mand., 856; causes operating for, 842; and developments, 863-4; French dependencies, 858-62; Gold Coast, 856-8; N. Rhodesia, 847; S. Rhodesia, 846-7, 867-8; Togoland, Br. Mand., 858; Union of S. Africa, 842-6.

collective system, in customary manifestations of, 833-5.

Land—Tenure, Native (*cont.*)

communal, question of scarcity, 869-70.

community membership as basis of rights, 830-7.

conditions governing form of, 874-5.

credit raised on, official intervention, 830.

customs regulating, diversities and similarities, 830.

delimitation of areas in Br. E. Africa increasing, 847-8.

economic units controlling subdivision, 1109.

failure of governments to study customs, 836-7.

formation of customs connected with, 830-6.

French dependencies, 485.

Glen Grey Act, objectives and provisions, 843-4.

individualization of property in, problem for legislators, 296.

inquiries into customary, 838-42.

Islamic influence on, 832.

judicial decisions as basis for ascertaining customary, 841-2.

Kenya policy, 868.

landlord system, 873-4.

lease and tenancy conditions, official intervention in, 830.

native authorities' rules modify customary, 829-36.

occupancy: advantages of system, 874-5; title, machinery for grant, 874-5.

peasant production and effect on, 884. 'pledging' to creditors, 836.

population transfers for anti-trypanosomiasis measures, and, 838.

Portuguese colonies, in, 863.

redemption of transferred land, 836.

reserves, in, customary, 721.

security, question of, 835, 868-70.

statutory law in Gold Coast, 829.

studies of customs: 836-42; Belgian Congo, 840-1; French territories, 840-1; Sierra Leone, 840.

summary and conclusions, 1649-50.

title: definition and records, official intervention in, 830; indefeasibility, advantage questioned, 877; individual—advantages claimed, 868-9, 870;—agricultural indebtedness and, 872-3;—conditions precedent to

Land—Tenure, Native (*cont.*)

- creation, 876;—credit facilities, abuse under, 872-3;—defects and changes of proprietorship, 871-4;—development, in Union of S. Africa, 843-5;—disadvantages of development policy, 870;—effect on customary, 875;—fragmentation of holdings, 873;—French policy of extension, 866;—Kenya Land Commission's recommendations, 868;—landlord system and, 872, 873-4;—native application for, reasons, 875-6;—need for caution in extending, 875;—'occupancy' form, value, 1650;—Br. W. Africa, provisions in, 868;—recognition, 870-1;—summary and conclusions, 1650;—tribal units possible, 1429-30; presumptive, advantages, 877; registration—as guarantee, 876;—systems, 876-8;—survey for, 876-8; Torrens system of grant, 876-7; *see also under* Law.
- transfers: under customary, 832-6; restrictions and agricultural credits, 854; redemption of, 836.
- tribal, possible economic development of system, 1429-30.
- Union Government policy, 867.
- usufructuary aspect, of customary, 864.
- Lango people, land tenure customs, study of, 839.

Language.

- Acoli, 77, 78.
- 'Africa' alphabet, 79.
- 'Africa' script: 86, 91, 94, 95; and its adoption and use, 80, 81.
- Afrikaans: 75; educational use, 1212.
- Ambo group, 83.
- Anuak, 77.
- Arabic, 78.
- Aro Cuku, 92.
- Bakweri, 94.
- Bali, 74, 84.
- Bambara, 76, 95.
- Bangi, 95.
- Bantu: 21, 74, 75, 88; phonetics, 75.
- Bari, 77.
- Bemba, 85.
- Bini, 74, 91.
- Bongo-Baka-Bagirmi, 76.
- Bonny, 92.

Language (*cont.*)

- Bushman, 19, 75.
- Chaga dialects, 88.
- Chewa, 86.
- 'Class', 76.
- classification: by Dr. Doke, 82; by Prof. Lepsius, 74; by F. W. Müller, 74; by Dr. E. W. Smith, 74, 76; by Dr. Westermann, 75; clue to migration, 74; racial basis, 18.
- Dagomba, 94.
- Dinka, 77.
- Djula, 95.
- Duala, 94.
- Dyernia, 95.
- education, native: policy and, 97-9; problem of, 1257-9, 1639.
- educational medium: British policy regarding vernacular, 1230; difficulties involved, 1285-6; French policy, 1282; Portuguese policy, 1277-8; Union of S. Africa, policy, 1223; vernacular question, 68.
- Efe, 77.
- Efik-Ibibio, 91.
- English, educational use, Union of S. Africa, 1212.
- European, official: in Belgian Congo, 1275; in Union of S. Africa, 1212.
- Ewe: 76, 94; Ewe-Akan, 76.
- examinations and influence on, 1254.
- Fante, 76.
- Fulani, 92, 93, 94.
- Ga, 94.
- Gur group, 76.
- Gwana, 88.
- Hamitic group, 74.
- Hamito-Semitic group, 75, 77, 78.
- Hausa, 78, 79, 80, 92, 94, 97.
- Hehe, 88.
- Herero group, 83.
- Hottentot, 75.
- Hottentot-Bushman group, 74.
- Ila, 86.
- Ila-Tonga, 86.
- Ilo, 76, 91.
- Iolof, *see* Wolof.
- Kakura, 88.
- Kanuri, 74, 92, 94.
- Karanga group, 85.
- Koisan group, 75.
- Kikuyu, 88.
- Kimvita, 90.
- Kingwana: 79, 90, 95; use in Belgian Congo, 1275.

Language (*cont.*)

- Kipsigis-Nandi, 88.
 'Kitchen Kaffir', 86.
 Kuinguja, 90.
 Kololo, 86.
 Konde, 87, 88.
 Kongo: 79, 95, 96; use in Belgian Congo, 1275.
 Kono-Vai, 95.
 Korekore, 85.
 Kwa group, 76.
 Kyiga, 88.
 Lamba-Luba-Wisa dialect, 85.
 Lese, 77.
 Limba, 95.
 Lingala: 95; use in Belgian Congo, 1275.
 Lolo, 95.
 Lozi, 86.
 Luba: 95; use in Belgian Congo, 1275.
 Luena, 86.
 Lunda-Lovale, 86.
 Madi, 88.
 Malinke, 95, 97.
 Mande group, 76.
 Mandingo, 76, 79, 95.
 Mandinka (branch of Mandingo), 95.
 Manenka, 95.
 Masai, 77.
 Mende, 80, 95.
 Momvu, 77.
 Moru-Madi, 76, 77.
 Mossi, 94.
 Mossi-Dagbane group, 76.
 Munshi, *see* Tiv.
 Nandi-Kipsigis, 77.
 Ndaui, 85.
 Ndebele, 85.
 Ndebele, Rhodesian, Zulu dialect, 82.
 Ndogo-Bviri, 76.
 Negrito, *see under* Language, pygmies.
 Negro family, classification, 74, 75, 76, 77.
 Ngala, 95.
 Ngoni, Bantu group, 82.
 Ngoni-Ndebele, Transvaal, Zulu dialect, 82.
 Nigritic, 76.
 Nilo-Hamitic group, 77.
 Nilo-Sudanic group, 77.
 Nilotic group, 75, 77, 88.
 Nilotic Hamitic, Teso, 88.
 Northern Sotho, 81.
 Nuba-Fula group, 74.
 Nuer, 77.

Language (*cont.*)

- number of, in Africa, 68.
 Nupe, 76, 92.
 Nyamwezi, 88.
 Nyanga, 87.
 Nyanja, 85-6.
 Nyoro, 88.
 Nzima, 94.
 Ogoni, 91.
 Onitsha, 92.
 orthography: 73, 78-81; adoption—
 Kenya, 88;—W. Africa, 80-1; Bemba, 86;—Central Committee, 81;—
 designed by Lepsius, 78;—Ganda, 88; International Committee for,
 Br. E. Africa, 90;—Karanga, 85;—
 problem, summary and conclusions,
 1639;—Shona, 85.
 Primitive language group, 74.
 pygmies (Negritos), 77.
 Ronga, 83.
 Sango, 95.
 Semitic group, 75.
 Shambala, 88.
 Shilluk, 76-7.
 Shona group, 85.
 Soka, 91.
 Sotho group, 82-3.
 Sotho-Ndebele, Transvaal mixed dialect, 82.
 Southern Sotho, 81, 82-3.
 Sudan, Inner, group, 77.
 Sudanic group, 75, 76, 77, 88.
 Sukuma, 88.
 Swahili: 78, 79, 86, 87, 90, 95, 97;
 educational medium, 1258-9; Kerigwana form, use in Belgian Congo,
 1275.
 Swazi, 82.
 Tatoga, 77.
 Temne, 80, 95.
 Teso, 88.
 Thonga group, 82, 83, 96.
 Thonga-Shangaan, 81.
 Tiv, 76, 80, 92, 93.
 Tonga: articles published in, 86;
 orthography, 81.
 Tswa grammar, 83.
 Tswana, 81, 82-3.
 Tumbuka, 87.
 Twi, 76.
 Twi-Fante, 94.
 'Union Ibo', 91.
 'Union' language: 69; educational
 medium, 1230, 1285; factors deter-

Language—'Union' (*cont.*)

- mining adoption, research needed, 1612.
- Union of S. Africa, number of recognized, 1223.
- Venda, 81, 82, 83.
- Wolof, 95.
- written, number of, 68.
- Xhosa, 81, 82.
- Yao, 87.
- Yoruba, 76, 91.
- Zaramo, 88.
- Zezuru, 85.
- Zulu, 81, 85.
- Zulu-Sotho dialect, 82.

INSTITUTIONS, STUDIES, &c.: Advisory Linguistic Committee, International Institute of African Languages and Cultures, 74; Austria, 70; Bantu studies in Union of S. Africa, 73; Belgian Congo, Conference, 96; Belgium, 71; British policy regarding studies, 1639; Capetown University Studies, 1211; *École Nationale des Langues Orientales Vivantes*, 72; France, 71; Germany, 71, 1639; Great Britain, 71; International Institute of African Languages and Cultures, 69 (*see also* International Institute of African Languages and Cultures); Inter-Territorial Language Committee, Br. E. Africa, 90;—its finance, 1448; Inter-University Committee, Union of S. Africa, 73, 81; Italy, 71; London School of Phonetics, 75; Missions, studies, 68; philological studies, 68; Nigerian Efik Bureau and Ibo Translation Bureau, 91; phonetics, 73; phonology, 99–100; Rejaf conference, 80; research, 99–102, 1621; School of Oriental Languages, African Dept., 72; *Société de Linguistique, Paris*, 102; S. Rhodesian Language Committee, 80; study—summary, 1639;—Union of S. Africa, 73 (*see also under* Universities); Translation Bureau at Zaria, 93; Tswana Language Board, 83; Union of S. Africa, 71; Witwatersrand University studies, 1211.

LINGUA FRANCA: adoption, 69; Chin-yanjy as, 85–6; educational medium, disadvantages, 1285;—and use, 1259; Hausa as, 92; Lingala as, in Belgian Congo, 95; Luba as, in Belgian

Language—Lingua Franca (*cont.*)

- Congo, 96; Pidgin English in Nigeria, 94; *Sango* as, in Fr. W. Africa, 95; Swahili as, 87, 88–91.

TERRITORIAL DISTRIBUTION: Anglo-Egyptian Sudan, 77; Barotseland, 86; Belgian Congo, 95, 96, 1275; Benue-Cross area, 76; Cameroons, 77; Cameroons, Br. Mand., 94; French dependencies, 95; Fr. Equatorial Africa, 77, 95; Fr. W. Africa, 95; Gambia, 95; Gold Coast, 76, 94; Ivory Coast, 77; Kenya, 88; Lake Chad area, 92; Mashonaland, 85; Matebeleland, 82, 85; Nigeria, 77, 91–4; Nyasaland, 87; Owerri region, 92; Portuguese colonies, 96; Sierra Leone, 95; S. Rhodesia, 85; Togoland, 76; Togoland, Br. Mand., 94; Uganda, 88; West Atlantic area, 76.

VERNACULAR: 81–96; book production, cost, 98–9, 1296; books, reading circles, 1296; broadcast programmes in, 1299, 1300; classification by Doke, 82; education in, 68, 1257–9, 1285–6; policy regarding, 1230; literature, 83;—Bini, 91;—Christian bibliography, 70;—distribution, 69, 70;—economic production, 98–9, 1296;—Fr. W. Africa, 95;—Gold Coast, 94;—Lovedale Press, 84;—missionaries work, 70;—Moriya Sesuto Book Depot, 84;—Portuguese colonies prohibition, 96;—Sierra Leone, 95;—Sobo, 91;—South African Christian Council Literature Committee, 84;—*Stewart Readers*, 84;—Tiger Kloof Book Room, 84;—Xhosa, 84; publications in, 68, 87, 1295–6; S. Rhodesian text-books, 85; Tanganyika education policy and, 87–8; teachers in Nigeria, 91; Uganda policy, 88.

Laval, P., colonial financial policy, 1450.

Law.

administrative, in French dependencies, 276–7.

African, developments required for native economic improvement, 1429–31.

ancient, resemblance to primitive African, 265.

Belgian dependencies, sources, 277.

British dependencies, sources, 270–3.

British protectorates, 270–3.

Law (*cont.*)

- case, evolution of, for land, native tenures, 829; *see also under* Land.
- character of: in British dependencies, 273-5; in French dependencies, 275-7; in Portuguese colonies, 279; in S. Rhodesia, 268-9.
- civil: African concepts of, divergencies from European, 295, 296; and land tenure, 296.
- comparison of French and Belgian systems, 278-9.
- contract, needed for native economic development, 1431.
- criminal, African conception, divergence from European, 295-6.
- and custom, study of African necessary, 264-5.
- customary, French conception, 485.
- differential: in S.W. Africa, 373-4; in Union of S. Africa, 366-8, 369-71, 688-9; *see also under* Legislation; Race Relations, and territories.
- evolution of system: in British India 262-3; in Roman Empire, contrasted with British India, 261-3.
- French civil code, application to land under *immatriculation* system, 859.
- introduction of system in Africa, 261-7; and its chief problems, 264.
- land tenure: case law, 829; methods of legislation compared, 279-80; modification of native custom, 829; in Tanganyika, 848; *see also under* Land.
- Moslem: application in N. Nigeria, 771; instruction in, chiefs' schools, Fr. W. Africa, 1265; land alienation, chiefs' authority, 832-3; land tenure—adapted from, in Br. E. Africa, 845;—native customary influenced by, 853;—native customary, and validity of transfers under, 836; progressive modification, 832-3; tithe, 858.
- NATIVE CUSTOMARY: African concepts, problems of reconciling with European, 294-5;—and possibility of concessions to by administrations, 295; Bantu law codified, 358-9; in Bechuanaland, 405; in Belgian dependencies, 277-8; characteristics of, 265-7; codification in Natal, 268, and its effects, 309; codification in Portuguese colonies, 279;

Law—native customary (*cont.*)

- comparative study needed, 309; evolution of, 308-9; land tenure—chiefs' powers, 832-3;—inquiries into, 838-42;—judicial decisions on, in Gold Coast, 840;—obstacle to agricultural development, 1429-30;—rights in Belgian Congo, legal review published, 841;—rights in Sierra Leone, study of, 840;—system regulated by, 829;—types of, 829-36; Laws of Lerethodi in Basutoland, 396; modifications by native authorities, 829-30; Natal Code, 359; Natal exemption system, 348; Native Administration Act (1927) (Union of S. Africa) and recognition, 360; native marriage law in Orange Free State, 363; recognition—in Ciskei, 349-50;—in French dependencies, 276;—in Natal, 357;—in S.W. Africa, 374;—in S. Rhodesia, 269-70, 379-80;—in Transvaal, 361;—in Uganda, 444;—in Union of S. Africa, 268-9; reluctance to recognize, in S. Africa, 267-8; studied Witwatersrand University, 1211; summary and conclusions, 1643-4; *see also under* Anthropology; Land, tenure.
- primitive, nature and objects of, 265-6.
- principles underlying, need for special study, 315.
- problem of producing homogeneous body still unsolved, 308.
- property: influence as economic incentive, 1430-1; need for, in native economic development, 1429-30; public, elements of in African law, 265-6.
- publication of in British and French dependencies compared, 280.
- Roman-Dutch, imposed on Transvaal native population, 361.
- sources of: in Belgian dependencies, 277; in British colonies, 270-2; in British protectorates, 270-3; in French dependencies, 275; in S. Rhodesia, 269-70; in Union of S. Africa, 267.
- statutory, land tenures, in Gold Coast, 829.
- water rights: in Kenya, 1043; in Tanganyika, 1045; in Union of S. Africa, 1029.

Law (*cont.*)

witchcraft and magic, problems of, 295-6.

Laws, Dr. R., reduction of rivers, Nyasaland, 1061.

League of Nations.

Assembly, public admitted to meetings, 219.

Biological Standardisation, Permanent Commission on, composition and work, 1153, 1616.

British Dominions, status of, in, 144.

Council, public admitted to meetings, 219.

Economic and Financial Section, world trade, comparative shares analysed, 1325.

Economic Intelligence Service, world production analyses, 1325.

Forced Labour Convention (1930), 628-9, 648.

Health Section: composition and functions, 1152-3, 1615-16; publications, 1153.

International Commission on Human Trypanosomiasis under Dr. Duke, 1130.

International Labour Office: expert of, at Permanent Mandate's Commission, 218; native labour contracts, report (1937), and recommendations, 657.

labour, native, contracts, Committee of Experts on Native Labour, recommendations, 663-4.

mandates, terms, limitations on economic preference, 1340-7.

mandatory system, value of, summary and conclusions, 1642.

Minimum Wage-Fixing Machinery Convention (1928), 695.

Permanent Mandates Commission: B and C class mandates defined, 217-18; biennial meetings in private, 219; closer union as affecting Tanganyika, ruling on, 183-4; composition of, 218; co-operation, native, in French mandates, inquiry, 1480; mandatory submits annual reports to, 218-19; mandatory system discussed, 216-17, 220; *prestation*, considered by, 626; reports by, to League Council, 219; right of petition to, 219; Ruanda-Urundi—

League of Nations—Permanent Mandates Commission (*cont.*)

education of chiefs, comments, 1276; —dismissal of chiefs, report, 535; taxation in Togo, Fr. Mand., 592; territories administered under, 216; value of publicity, 219-20.

recruiting of Indigenous Workers Convention, provisions, 656, 658.

S.W. Africa, Union Government's report on constitutional position, 178.

Statistical Year Book, 107.

Temporary Slavery Commission: labour recruitment, 648; *prestation* system, 620.

Leave pay, effect of, on trade balance, 1350-1; *see also under* Trade.

Lebrun, M., forest studies, 1012.

Leenings-plaats, system of land settlement, 814.

Legislation.

Belgian colonial system, 248.

British colonial legislative councils, 162-73.

British colonial system, 248-50.

British Crown colonies, conditions governing, 160.

British Dominions, Conference on Operation of Dominion Legislation, resolution on secession, 146.

Br. W. African system, 171.

Cameroons, Fr. Mand., system, 193.

differential: labour offences, 663; Pass Laws, 664-71; S.W. Africa, 373-4; Union of S. Africa, 366-8, 369-71; 688-9.

French colonial system, 185-7, 248.

French dependencies, system, 192-3.

labour offences, 659-64.

leprosy, different territories, 1141.

Portuguese colonies, 213.

Ruanda-Urundi, 213.

Sleeping-Sickness Ordinance, Uganda, 1132.

Togo, Fr. Mand. system, 193.

Union of S. Africa: census, 110; land segregation, and conditions of native residence, 131; vital statistics, 110-11.

wage-determination, 695.

See also under territories.

Leiper, Prof. R. T., department of helminth research, London School of Hygiene and Tropical Medicine, 1146.

- Lely, F., study of useful trees, Nigeria, 1010.
- Leopold II: acquisition of Congo, 1310; concordat concluded with Vatican on national missionaries, 1269; economic policy in Congo Free State, 141; government of Congo Free State criticized, 143; Katanga Railway concession grant, 1573, 1594.
- Leopold III: colonial policy of, 141; mission to Congo, 208; peasant proprietorship advocated, 862.
- Lepsius, Prof. R.: linguistic studies, 74; orthography work, 78.
- Lerothodi, Laws of: land allocation under, 729; native customary law, 396; native labour service regulated by, 609-10.
- Leroy-Beaulieu, M.: land policy advocated, 859; opinion on French system of decree-legislation, 279.
- Lese language, 77.
- Lester, Dr. A. R., medical survey in Tanganyika, 114.
- Lestrade, Prof. G. P.: editor of vernacular translations, 83; Professor of Bantu, Capetown University, 73.
- Lestrade, Prof. G. P., and Schapera, Prof. I., Bechuanaland native land tenure studied, 838.
- Letsema, Basutoland native labour service, 609.
- Leubuscher, Dr. C., statistical information compiled, 1324, n. 1.
- Lever, Bros., Messrs.: Belgian Congo concession, *see under* Belgian Congo, industrial concerns (*Huilieries du Congo Belge*); concessions sought in Nigeria, 770.
- Leverhulme Trust, financial aid for anthropological research, 53.
- Leverhulme Trust Fellow, land tenure studied by, 840.
- Lewanika, Paramount chief of Barotseland: 457; Treaty with British South Africa Company, 738.
- Lewis, A. D., Director of Irrigation, Union of S. Africa: Kenya water-supply report, 1042; visit to Kenya on Tana river plan, 1041.
- Liberia: climate, 12; Forced Labour Convention ratified, 629; League of Nations missions, 1153; meteorological service, 16; yellow fever, 1127, 1128.
- Libraries: native, 1294; Union of S. Africa, 1292.
- Liebig, Messrs.: meat factory in Kenya, 939, 1098; and in S. Rhodesia, 938.
- Limba language, 95.
- Limpopo river: 4; navigation limit, 1540.
- Lingala language: 95; Belgian Congo use, 1275; commercial use, 96.
- Lingua franca, *see under* Language.
- Lippert, E., concession in S. Rhodesia, 732-3.
- Liquor, alcohol factory, Germiston, Union of S. Africa, 920; bananas and plantains in preparation of, 901; Gold Coast control and taxation, 1443-4; Kenya municipal beer monopoly, employment of revenue, 517; native beer, millet cultivation for, 893; native, control—in N. Rhodesia, 516;—in S.W. Africa, 516;—in S. Rhodesia, 511;—in Union of S. Africa, 506-7; sale to natives in Portuguese colonies, 682.
- Literature: African Literature Committee in N. Rhodesia, 87; African, prize offered, 87; *see also under* Language, vernacular.
- Little Women, popularity among natives, 1294.
- Liverpool Uganda Company, agricultural production, 1043.
- Livestock, *see under* Agriculture.
- Livingstone, Dr. D.: journeys of, 1310; Kalahari lake theory, 1035; medical missionary work, 1116; mission in Africa, 1235.
- Livingstone College, foundation and purpose, 1117-18.
- Livingstonia Mission, use of Tumbuka language, 87.
- Liwali, Arab native court magistrate in Tanganyika: 439; functions in Tanganyika, native administration, 518.
- Lloyd, Miss L. C., study of Bushman dialects, 75.
- Lloyd, Dr. W., yellow fever preventive inoculation, 1129.
- Loans, *see under* Finance, Public.
- Lobengula: mineral concessions granted by, 1492; mining concessions in Bechuanaland, 1524; in S. Rhodesia, 732; Tati concession granted, 731; treaty with British South Africa Company, 1519.
- Lobolo (bride-price): cattle, importance for, 22; disapproval by early missions, 41; goats as payment, 1079; obstacle to livestock reduction, 1069; recognition of, by Union Native Administra-

Lobolo (bride price) (*cont.*)
 tion Act, 41; regulation in Natal, 282;
 Transvaal provisions regarding, 362.
 Locusts: Committee, research co-ordina-
 tion, 1625; control organization, 1617;
 international control, 1616; research—
 Amani Station, 95-6;—Nigeria, 950;
 sunspot cycle and, 14.
 Lolo language, 95.
 London Economic Conference (1933),
 transfer of High Commission Territories
 to Union considered at, 174.
 London School of Hygiene and Tropical
 Medicine, *see under* Great Britain.
 Long, Dr. E. C., Medical Officer, Basuto-
 land, 1156.
 Lorele people, in Barotseland, political
 position, 456-7.
 Lovedale Press, vernacular literature, 84.
 Lozi (Kololo) language: 86; orthography,
 81.
 Lozi people, in Barotseland, political
 organization, 456-7.
 Luba language: 95; commercial use, 96;
 lingua franca in Belgian Congo, 96;
 use in Belgian Congo, 1275.
 Lucas, F. A. W.: evidence to Native
 Economic Commission, 663; inspectors
 for native farm labour conditions
 recommended, 673.
 Lüderitz, Gen., native land purchase in
 S.W. Africa, 725.
 Luena language, 86.
 Lugard, Lord: income and profits tax in
 Nigeria, definition, 578; indirect rule
 policy, 133, 536; native administration
 in Nigeria, 417-19; native administra-
 tion views compared with Sir D.
 Cameron, 432; native taxation, at-
 tempts in S.E. Nigeria, 581;—and views,
 577; *Political Memoranda*, 134; trans-
 port development stressed, 1417; white
 settlement in Kenya supported, 743.
 Lukas, Dr. J.: author of *Study of the*
Kanuri Language, 92; linguistic study,
 72, 74, 92; research expedition, 73.
 Lukiko: consent to land alienation re-
 quired, 827; land legislation, 762;
 venereal disease, compulsory treat-
 ment law, 1144; *see also under* Uganda,
 Buganda.
 Lumbwa people, labour migration of,
 702.
 Lunda-Lovale language, 86.
 Lunda people, political organization of, 23.

Lundi people, in Barotseland, political
 position, 456-7.
 Luwalo, commutation of, 619; effect on
 wages, 619; extension to Uganda, 612;
 labour dues in Buganda, 611-12;—and
 Uganda, 575-6.

M

Macaulay Institute, *see under* Great
 Britain.
 MacDonald, Rt. Hon. M., announce-
 ment on question of transfer of High
 Commission Territories, 175-6.
 MacGregor, W. D., sylviculture of mixed
 deciduous forests, study, 1011.
 Mackenzie, Dr. M. D., mission to Liberia,
 1153.
 MacLeod, Brigadier, survey projection
 scheme, 9.
 Maco, *see under* Belgian Congo, industrial
 concerns.
 Madagascar: conscript labour abolished,
 628-9; educational policy of Galliéni,
 1266; language, in north-west, 75;
 meteorological services, 15.
 Madi language, 88.
 Magic, *see* Witchcraft and Magic.
 Magotte, M., comment on place of chiefs
 in Congo administration, 493.
 Mailo lands: mineral prospecting, 1521;
 mineral rights, 1519; tenure question,
 851-2; *see also under* Uganda, Buganda.
 Mair, Dr. L. P., land tenure customs of
 Ganda, study of, 839.
 Maji Maji, rebellion, 1389.
 Makerere College, *see under* British East
 Africa, education, native.
 Makerere Commission, *see under* British
 East Africa, education, native.
 Malan, Dr. F. S., Nationalist Opposition
 leader, Union of S. Africa, 146.
 Maliki language, 95, 97.
 Maliki Law, Islamic land law, 771.
 Malinowski, Prof. B.: anthropology, field
 work methods, 44; linguistic work,
 102; quoted, 101.
 Malnutrition, disease resistance lowered
 by, 1199.
 Mambo Leo, vernacular paper, 88, 1295.
 Man, Royal Anthropological Institute
 publication, 51.
 Man of Africa, by Samuel Y. Ntara, 87.
 Mance, Sir O.: E. African transport
 proposals, 1610; transport co-ordination

- Mance, Sir O. (*cont.*)
 in Br. E. Africa, recommendations,
 1580; transport inquiry, Br. E. Africa,
 1555-6.
- Mande languages, 76.
- Mandingo language, 76, 79, 95.
- Mandinka (branch of Mandingo) lan-
 guage, 95.
- Manenka language, 95.
- Manyika language, 85.
- Marandellas, *see under* Southern Rhodesia.
- Marchoux, Professor E., malaria control
 measures advocated by, 1125.
- Marco Polo, comments on Indian trade
 in Africa, 318.
- Markets, *see under* Economic System;
 Agriculture, native, and territories.
- Marran, René, native winner of *Prix Gon-*
court, 1294.
- Masai language, 77.
- Masai people: belligerent activities, 743;
 cattle-owning tribe, 882; description
 of, 29; government of, in Tanganyika,
 439; land action (1912) in Kenya, 746;
 opposition to employment, 694; reduc-
 tion in, 743.
- Mashonaland, *see under* Southern
 Rhodesia.
- Matabele rebellion, economic progress
 affected by, S. Rhodesia, 1379.
- Matabeleland, *see under* Southern
 Rhodesia.
- Mathews, Z. K., in charge of Social
 Anthropology and Native Law at Fort
 Hare, 53.
- Mauch, C., gold discovery in Mashona-
 land, 1487.
- Maugham, Mr. Justice, North Charter-
 land Concession Inquiry, report, 739.
- Maunier, Professor R., directs ethno-
 logical jurisprudence section at Paris
 University, 55.
- Maury, Commandant, survey projection
 scheme for Belgian Congo, 9.
- Maxwell, Sir J. C.: appointment to N.
 Rhodesia, 453; land tenure, native
 customary law on, in Sierra Leone,
 studied, 840.
- Mbere people, reserves erosion, 1070.
- Mediterranean region, erosion control,
 1064.
- Meek, Dr. C. K.: government anthropo-
 logist in Nigeria, 424; on Ibo religious
 practices, 28; land tenure—customs of
 Ibo studied, 839-40;—native customs in
 N. Nigeria, studies of, 839; seconded
 for anthropological inquiry in Nigeria,
 47.
- Meillet, Dr., linguistic scholar (quoted),
 97.
- Meinhof, Dr. C.: linguistic scholar, 68,
 72, 75; work on Hamito-Semitic lan-
 guages and orthography, 78-9.
- Melzian, Dr. H. J.: language studies, 74,
 91; research expedition, 73.
- Mende language, 80, 95.
- Mende people rising, 1399.
- Merensky, Dr., Namaqualand diamond
 area discovered, 1510.
- Merlin, Governor-General, conscription
 of natives opposed, 627.
- Merriman, J. X., criticizes Natal native
 administration, 358.
- Mertens, E., 1016.
- Meteorology: 15-17; and aviation, 15;—
 requirements, 1637; compilation of
 data, co-ordination, 1611; inter-
 national co-ordination of services for
 aviation, 1603; rainfall in S. Africa,
 1027; weather reports, broadcasts for
 aviation, 1603.
- Meyer, Dr. E., language study, 74.
- MIGRATION:
 agriculture, native, affected by, 885.
 Bantu, 22, 74.
 effect on population question, 129.
 immigration of settlers into Union of
 S. Africa, 816.
 labour: 605, 1361; areas mainly
 affected, 703; Belgian—investiga-
 tion, 705;—policy, 708-9; Com-
 mittee on Emigrant Labour, Nyasa-
 land, 648; effect on—health, 705;—
 population, 703, 705;—tribal and
 family life, 704-5; French depen-
 dencies—nature of problem, 705;—
 regulations, 708; industrial develop-
 ment and, 706-7; influence of taxa-
 tion on, 594; investigation needed,
 705, 1614; Kenya attitude, 707;
 natives from Belgian Congo to
 Uganda, 647; Nyasaland—Emigrant
 Labour Committee, recommenda-
 tions, 709;—special problem, 707;
 policies suggested, 705-7; Portu-
 guese colonies, policy, 708; problems
 created, 699-709; Rand demand and,
 693; recruitment regulations to con-
 trol, 706; S. Rhodesian attitude, 707;
 statistics of extent of, 700-3; Tan-

Migration—labour (*cont.*)

- ganyika attitude, 707; taxation, 564;
- Union of S. Africa—employment of 'foreign' labour, 700;—Governments' attitude, 706-7.
- Milner, Lord, Secretary of State for the Colonies: compulsory agricultural production, dispatch, 630; Indian policy of, in regard to Kenya, 337; land policy in Union of S. Africa, 815-16; native identification, need stated by, 668; native labour, policy defined in dispatch by, 616; Northey circular, dispatch (1920), 641.

Minerals.

- administration of industry, state mining, 1515-16.
- asbestos: production, 1326; S. Rhodesia, 1494.
- base: exploitation neglected, 1534-5; royalties payable, 1531.
- bauxite, Nyasaland, 1496-7.
- bismuth, N. Rhodesia, 1496.
- chrome ore: production, 1326; S. Rhodesia, 1494.
- coal: Belgian Congo, 1495; Moçambique, 1508; Nigeria, 1502; royalties payable, 1530; S. Rhodesia, 1494; Union of S. Africa, 1490.
- cobalt, N. Rhodesia, 1496.
- columbite, Nigeria, 1502.
- copper: Belgian Congo, 1506; N. Rhodesia, 1495-6; production, 1326; royalties payable, 1531; S.W. Africa, 1331, 1491; S. Rhodesia, 1494; Uganda, 1500.
- development: summary and conclusions, 1660-1; transport, 1604.
- diamonds: Angola, 1515; Belgian Congo, 1514-15; comparative production of areas, 1512; export S.W. Africa, 1331; Fr. Equatorial Africa, 1514; Gold Coast, 1513-14; Nigeria, 1514; price fluctuations and production limitation, 1486; Sierra Leone, 1503, 1514; S.W. Africa, 1513; Tanganyika, 1513; Union of S. Africa, 1509-12.
- distribution, 1484.
- geological survey for development, 1536.
- gold: Belgian Congo, 1507; French dependencies, 1504-5; Gold Coast, 1502-3; Kenya, 1499; Moçambique,

Minerals—gold (*cont.*)

- 1508; Nigeria, 1501-2; N. Rhodesia, 1496; price stability, 1486; royalties, 1531; Sierra Leone, 1503; S.W. Africa, 1491; S. Rhodesia, 1492; Tanganyika, 1498-9; Uganda, 1500; Union of S. Africa, 1487-9.
- graphite production, 1326.
- haematite, Sierra Leone, 1503.
- High Commission Territories, 1491.
- influence on penetration of Africa, 1484.
- iron ore, Sierra Leone, 1503.
- lead, N. Rhodesia, 1496.
- manganese: Gold Coast, 1503; N. Rhodesia, 1496; ore production, 1326; Union of S. Africa, 1490.
- metal industry, present development, 1535-6.
- mica, N. Rhodesia, 1496.
- platinum: production, 1326; Sierra Leone, 1503.
- production, 1326.
- prospecting in native lands, 1521-2.
- radium production, 1326.
- resources unknown, 1535.
- rights: ownership in territories, 1518-21; systems—diversity of details, 1518;—effect on development, 1517-18.
- salt, Uganda, 1500.
- silver: Belgian Congo, 1506; N. Rhodesia, 1496.
- sodium carbonate, Kenya, 1499.
- survey, 1516-18.
- tanalite, Uganda, 1500.
- taxation, royalty systems, 1530-1.
- tin: Belgian Congo, 1507; international restriction agreement, 1501; Nigeria, 1500-1; N. Rhodesia, 1496; ore production, 1326; royalties payable, 1531; Tanganyika, 1498; Uganda, 1500.
- uranium, Belgian Congo, 1507.
- vanadium: N. Rhodesia, 1496; production, 1326; S.W. Africa, 1491.
- zinc, N. Rhodesia, 1496.
- Miners' phthisis, *see under* Health and Medicine, disease (silicosis).

Mines.

- asbestos, S. Rhodesia, 1494.
- Belgian Congo: labour—migration, 702-3;—policy, 681; mortality rate of employees, 681.

Mines (*cont.*)

- capital invested: Belgian Congo, 1322; British areas, 1322; British dependencies, 1322.
- chrome, S. Rhodesia, 1494.
- coal: Belgian Congo, 1495; Moçambique, 1508; Nigeria, 1502; S. Rhodesia, 1494; Union of S. Africa, 1490.
- considerations governing development, 1534.
- copper: Belgian Congo, 1506-7; capital investment, N. Rhodesia, 1322; S.W. Africa, 1491; S. Rhodesia, 1494-6.
- development: 1485-6; administrative action, scope for, summary and conclusions, 1661; future, 1535; summary and conclusions, 1660-1.
- diamond: Angola, 1515; Belgian Congo, 1514-15; capital—foreign invested, 1311;—investment, Union of S. Africa, 1321; discovery, 1311; dividends paid, 1323; Fr. Equatorial Africa, 1514; Gold Coast, 1513-14; production, comparative, of areas, 1512; Sierra Leone, 1514; S.W. Africa, 1513; Tanganyika, 1513; Union of S. Africa, 1509-12.
- exploitation, factors governing, 1484.
- gold: Belgian Congo, 1507; capital investment, Union of S. Africa, 1321-2; development of Rand, 1312; dividends paid, 1323; French dependencies, 1504-5; Gold Coast, 1502-3; Kenya, 1498-9; Moçambique, 1508; Nigeria, 1501-2; S.W. Africa, 1491; S. Rhodesia, 1492-4; Tanganyika, 1497-8; Union of S. Africa, 1487-9.
- High Commission Territories, 1491.
- importance in European economy—summary and conclusions, 1657-8.
- influence on territorial economic development, 1534.
- Kenya: mining leases, 754; native labour conditions, 676.
- labour, native: conditions—in Gold Coast, 678;—in N. Rhodesia, 675; measles, susceptibility, 1151; pneumonia prevalent, 1150-1; recruitment, 693; silicosis incidence, 1148-9; tuberculosis, 1139; utilization of, 1312; welfare regulations in Union, 673.
- labour, non-native, silicosis incidence, 1148-9.

Mines (*cont.*)

- manganese, Union of S. Africa, 1490.
 - native exploitation, early history, 1484-5.
 - Nigeria, disablement compensation, 677.
 - N. Rhodesia: labour organization, 691; native labour conditions, 675; wages, native, 691-2.
 - Pass Laws: applicable to native labour on, 667.
 - Pass system, Lupa gold fields, 671.
 - private exploitation, 1484.
 - prospecting: large concessions, advantages and disadvantages, 1529; regulations regarding, Union of S. Africa, 1522-4; value of small prospectors, 1528-9.
 - regulations: penalty for breach in N. Rhodesia, 660-1;—in Union of S. Africa, 1522-4.
 - revenue contribution of, 1461-2.
 - silicosis, compensation in Union, 674; *see also under* Health and Medicine, disease.
 - S.W. Africa, welfare inspection, 674.
 - S. Rhodesia, native conditions, 674-5.
 - state enterprise, 1515-16.
 - Tanganyika, Lupa gold fields, labour conditions, 676-7.
 - taxation: considerations governing, 1462, 1529-30; profits, 1531-3; royalties payment, 1530-1.
 - tin, Nigeria, 1501.
 - Union of S. Africa, 'foreign' (immigrant) native labour, 700.
 - uranium, Belgian Congo, 1507.
 - wage rates, native, influence on, 1534.
 - Mise en valeur*, French colonial policy, influence on agricultural production, 633.
- Missions.**
- American Mission Board, medical work, 1116.
 - Anglican mission, medical work, 1156.
 - Baptist Missionary Society: early establishment in Congo, 1269; medical work, 1117.
 - Basel: Duala, work on vernacular, 94; W. Africa death-roll, 1117.
 - Belgian, medical work, 1195-6.
 - Belgian Congo: education work, 142; government's policy, 141-2; national and non-national, 142.

Missions (*cont.*)

- Benedictines, medical work, 1119.
 Capuchins, health work in Angola, 1115.
 Church Missionary Society: bookshop at Lagos, 70; medical work, 1117-18, 1165, 1167; Mengo Hospital, 1144; native medical training, Uganda, 1184-5; schools in Uganda, 1244.
 Church of Scotland mission: medical work, 1165; native medical training, Nyasaland, 1188; native vocational training, 1246.
 Commission for the Protection of Natives, foundation, 210.
Conseil Protestant du Congo, standard Luba language, work, 96.
 Dutch Reformed Church, vernacular book publication by, 87.
 Edinburgh Medical Mission, foundation, 1116.
EDUCATIONAL WORK:
 Belgian Congo, 1282-3.
 British Government policy regarding, expounded, 1229-30.
 control of, in Union of S. Africa, 1215.
 denominational discrimination: Belgian Congo, 1269-70; British impartiality, 1237; French, 1262-3, 1266, 1269; Portuguese colonies, 1277-8.
 female: 1255; in N. Rhodesia, 1255-6; Tanganyika, 1256.
 financial limitations, 1242.
 Fourah Bay College supported, 1250.
 government grants, conditions and calculation, 1236-7.
 language policy, 1236.
 participation in: Cameroons, Fr. Mand., 1268-9; Fr. Equatorial Africa, 1268; Togoland, Fr. Mand., 1267.
 pioneers, 1235.
 Portuguese colonies, 1277-8.
 position in regard to: under French rule, 1264-5; in Union of S. Africa, 1218.
 Protestant acceptance of control, 1235-6.
 representation on government bodies, 1238-9.
 Roman Catholic, attitude to non-Catholic schools, 1236.
 Ruanda-Urundi, 1275-6.
 schools: 'bush', teaching given, 1242; Fr. W. Africa, 1264-5; government

Missions—Educational Work (*cont.*)

- aid, 1233; inspection and control by government, 1237-8; scope, 1236; S. Rhodesia, 1224, 1226; supervision recommended in British dependencies, 1233.
 teachers: registration, 1237; salaries, 1237; training in—Gold Coast, 1251;—N. Rhodesia, 1250;—Nyasaland, 1251;—Sierra Leone, 1251;—Tanganyika, 1251;—Uganda, 1251; women, their training, 1251.
 technical and craft training, 1246.
 Togoland, Fr. Mand., 1264-5.
 Union of S. Africa: 1213; early teaching, 1218; participation, 1207.
 vocational training, farm schools in Uganda, 1244.
 English Roman Catholic, recognition in Belgian Congo, 1270.
 Established Church of Scotland, medical work, 1117.
 Exploration by, 1310.
 Fathers of the Holy Ghost, medical work, 1116, 1119.
 Finnish, medical work, 1156.
 Franciscan Sisters, health work, 1167.
 Franciscans, medical work, 1119.
Frères de la Doctrine Chrétienne, educational qualifications, Belgian Congo, 1271.
Frères Maristes, educational qualifications, Belgian Congo, 1271.
 German, in Gold Coast, work on language, 94.
 International Missionary Council: Department of Social and Industrial Research, cultural films project, 1302-3; health work, 1154; International Committee on Christian literature, *Books for Africa*, 70.
 Jesuits: medical work, 1119; in N. Rhodesia, 86.
 Language study, 68.
 Livingstonia: established in Nyasaland, 1385; language policy, 87; native vocational training, 1246.
 London Missionary Society: educational work, S. Rhodesia, 1228-9; female education in N. Rhodesia, 1255-6.
 Lovedale Institution, medical work, 1116.
MEDICAL WORK: British Advisory Council, 1154; Cameroons, Fr. Mand., 1176; charge for treatment, 1202; Fr.

Missions—Medical Work (*cont.*)

- Equatorial Africa, 1177; Fr. W. Africa, 1175; Moçambique, 1181; native training, 1246;—Belgian Congo, 1192;—Uganda, 1190; Togo, Fr. Mand., 1177.
- Mnene Medical, leprosy work, S. Rhodesia, 1142.
- Moravians, leper colony in Cape Province, 1115.
- Native policy, divergence from government, Union of S. Africa, 1218.
- Nazarene, medical work, 1157.
- Neukirchen Mission Society, medical work, 1165.
- Official attitude towards: Fr. Equatorial Africa, 1268; Union of S. Africa, 1216.
- Protestant: Congo Free State, charges against, 1270; educational work—Portuguese colonies, 1277;—schools in Ruanda-Urundi, 1276;—subsidy, Cameroons, Fr. Mand. 1269; medical work—Angola, 1182;—Belgian Congo, 1179; 'Union Ibo', attitude of, 91.
- Rhenish Mission, medical work, 1156.
- Roman Catholic: Congo Free State, apologists for régime amongst, 1270; education, native—preponderant influence, Belgian Congo, 1270;—schools in Ruanda-Urundi, 1276;—subsidy, Cameroons, Fr. Mand., 1269; labour questions in Belgian Congo, 647; language work, Belgian Congo, 96; medical work—Angola, 1182;—Belgian Congo, 1179;—doctors employed by, 1119;—Papal Encyclical, 1119; Portuguese, special position in colonies, 1277.
- St. Germain treaty, effect of, in Fr. Equatorial Africa, 1268.
- Salesian Fathers, educational qualifications, Belgian Congo, 1271.
- Seventh Day Adventists, medical work, 1165.
- Society for the Propagation of the Gospel, medical work, 1116.
- Swiss, educational work in Moçambique, 1278.
- Uganda: attitude to Swahili, 88–9; use of vernacular, 88.
- United Copperbelt Missions in N. Rhodesia, education work, 675.
- United Free Church of Scotland, medical work, 1117.

Missions (*cont.*)

- Universities' Mission, medical work, 1116–17.
- Vital statistics recorded by, in Belgian Congo, 121.
- Wesleyan Methodist Missionary Society: medical work, 1157, 1165; W. African conditions investigated, 1118; W. African death-roll, 1117.
- White Fathers: medical work, 1118, 1119; primary school, Dakar, 1264.
- White Sisters, medical work, 1118–19.
- Moçambique Company, *see under* Portuguese Colonies.
- Moffat, Hon. H. U., Prime Minister, S. Rhodesia, action on franchise question, 159.
- Mofolo, *Life of Chaka*, 83.
- Momvu language, 77.
- Morocco, vocational education, 1266.
- Morant, Dr. G. M., on physical characteristics of African people, 341.
- Morija Sesuto Book Depot, vernacular literature, 84.
- Moroka, land titles conferred by, recognized, 845.
- Moru-Madi language, 76, 77.
- Moshesh, Basuto ruler: organization under, 23; relations with Great Britain, 394.
- Moslem: chiefs—education, Cameroons, Fr. Mand., 1269;—school for, Fr. W. Africa, 1265; law, taught, chiefs' schools, Fr. W. Africa, 1265; opposition to French educational policy, 1260; schools, Ruanda-Urundi, 1276.
- Mosquitoes, *see under* Health and Medicine, disease (vectors).
- Mossamédès Company, *see under* Portuguese Colonies.
- Mossi language, 94.
- Mossi people, political organization, centralized, 27.
- Mossi-Dagbani languages, 76.
- Moyne, Lord: Asiatic taxation in Kenya, findings, 339; contributions and benefits, racial division, investigation, 1457–8; Kenya finance study, 386; Kenya native taxation—graduated tax proposal, 574;—hut tax on women considered by, 574;—liability, recommendations, 573; Kenya taxation, incidence estimated, 1463.
- Mpeseni: concessions granted in N. Rhodesia, 738; land reservation, 739–40.

- Mugabe of Ankole, land control under agreement, 760-1; *see also under* Uganda, Ankole.
- Mukama of Toro, land control under agreement, 760-1; *see also under* Uganda, Toro.
- Mulago School, *see under* British East Africa, education, native.
- Müller, F. W., classification of languages, 74.
- Munro, Prof. J. W., cotton pest control work, 903.
- Muramati, functions in Kikuyu land tenure system, 849.
- Muruka chiefs, Uganda village chiefs, 445.
- Musée du Congo Belge*, publications, 55.
- Music, native, destructive influence of European contact, 1290.
- Mutala surveys, *see under* Survey.
- Mutende*, vernacular paper, 1295.
- Muwanika, Uganda native official, 447.
- Mwanafunzi*, Swahili children's magazine, 88, 1295.

N

- Nadel, Dr. F. S., appointed government anthropologist in Anglo-Egyptian Sudan, 54.
- Namaqua people, rebellion in German S.W. Africa, 726.
- Nandi people: cattle-owners, 882; description, 29; labour migration, 702.
- Nandi-Kipsigis language, 77.
- Natal, *see under* Union of S. Africa.
- National African Company, charter granted to, as Royal Niger Company, 1396.
- National Colonial Congress (Belgium), Permanent Committee of, and population, 105.

Native Administration.

- Barotseland, comparative study, 416.
- Belgian Congo, 491-6, 535-6.
- Cameroons, Br. Mand., 433-4.
- detribalization, meaning of term, 498-9.
- detribalized native, special problems, 545.
- direct rule, summary and conclusions, 1645.
- Dutch East Indies, comparative study, 414-15.
- economic development, need for administrative guidance, 1431.

Native Administration (*cont.*)

- erosion control by destocking, attitudes towards, 1069-71.
- Federated Malay States, 415.
- French dependencies: 484-91, 533-5; political and social objectives, summary and conclusions, 1640.
- French Indo-China, comparative study, 415.
- Gambia, 482-4.
- Gold Coast, 465-77.
- High Commission Territories, 393-413, 416.
- historical evolution of, 527-8.
- India, British, comparative study of, 413-14.
- INDIRECT RULE: compared with direct rule, 536-42; criticisms, 537-40; development, 413-16, 536-7; educated African's attitude to, 541-2; representative institutions, difficulty of reconciling, 1639-40; summary and conclusions, 1646.
- industrial areas: permanent population, general problems, 496-9; population, *see also under* Native Administration, urban natives; resident population in uniform employment, 497; short-term residents, problems of, 496-7.
- judicial system: native courts—appeals from, over land tenure rights, 829;—decisions as basis for ascertaining land tenure customs, 829;—under indirect rule, criticisms, 538;—Kenya, 389-90;—land tenure rights and, 829; summary and conclusions, 1643-4; *see also under* Justice, administration of.
- Kenya, general policy discussed, 532.
- labour recruitment by native authorities: attitudes of administrations, 649-56; Belgian Congo, 647-8; Geneva Convention, provisions, 656.
- lectures, University of Pretoria, 1211.
- NATIVE AUTHORITIES: anti-erosion rules in Tanganyika, 1092; census in Tanganyika by, 114; co-operation, attitude to, 1483; co-operative societies, advantages of associating, 1660; development by European contact, 539-41; educational work, 1233; forest administration, 1023-4; health service duties, reporting of deaths, 1205-6; land titles, registration, Br.

Native Administration—Native Authorities (*cont.*)

E. Africa, 848; law, native customary, modified by, 829-30; taxation discussed, 598-9; type recognized, 536.
 native councils: in Kenya, 390-7;—and S. Rhodesia, 380-1; *see also under territories*, native administration.
 native representation, Union of S. Africa, summary and conclusions, 1640.

native treasuries: contributions to, in Belgian Congo, 593; direct taxation required for, 594-5; *see also under territories*, native administration.

Nigeria, 416-33.

non-tribal: coast groups in E. Africa, 496; fishermen in Cameroons, Br. Mand., 496; natives in native conditions, 496; residents of Sabon Gari, Kano, 496; settlements of soldiers in Belgian Congo, 496.

N. Rhodesia, 452-61.

Nyasaland, 462-5.

Ruanda-Urundi, 494-5.

Sierra Leone, 480-2.

significance of term, 345-6, 527.

S.W. Africa, 373-6.

S. Rhodesia, 376-82, 532.

studied, University of Witwatersrand, 1211.

summary and conclusions, 1645-6.

Tanganyika, 434-43.

Togoland, Br. Mand., 477-80.

Uganda, 443-52.

Union of S. Africa, 346-73, 415-16, 529-32.

URBAN NATIVES: 496-9; areas, special problems presented, 543-5; French dependencies, 526-7; groups, composition and employment, 497-8; *immatri-culation*, 498; increase in numbers inevitable, 545; influence of taxation, 594; labour, diet and living conditions, regulations, 1199; locations, natives resident, problems created, 496-9; N. Rhodesia, 512-15; social services, responsibility for, 498; S.W. Africa, 510; S. Rhodesia, 510-12; study of problems required, 545; summary and conclusions, 1646; taxation and increase of, 596; Union of S. Africa, 499-510.

See also under territories, native administration, for details in each territory.

Native languages, *see* Language.

Native Mirror, vernacular paper, 1295.

Ndau language, 85.

Ndebele language, 85.

Ndebele, Rhodesian; Zulu dialect, 82.

Ndongo-Bviri language, 76.

Neethling, Dr. J. C., wage investigations in Union, 687-8.

Negritos (pygmies), language, 77.

Negro language group, 74, 75, 76, 77.

Negro peoples: description of, 18-19, 26-8; economicspecialization amongst, 26; political organization of, 26-7; pursuits of, 26; religious beliefs and practices, 28-32; secret societies, influence of, 27-8; W. African chieftainship, functions of, 25.

Nekes, Dr., Bantu phonetics study, 75.

Nelspruit fruit research station, *see under* Union of S. Africa.

NETHERLANDS:

Berlin Act signatory, 1341.

Dutch, census policy, 110.

Dutch East India Company: Asiatic labour imported by, 603; mineral prospecting in S. Africa, 1487; slaves introduced into S. Africa, 637; supersession by British, 1310.

Dutch East Indies, native administration, comparative study, 414-15.

exports: cotton piece goods, Kenya and Uganda, decline, 1336.

imports, palm kernels, 1332.

Netherlands Indies, population density of, 2.

Netherlands Railway Company: operations in S. Africa, 1567; railways acquired, 1568.

Neveling, Dr. C. H., wage investigations in Union, 687-8.

Ngala language, 95.

Ngitili lands of Sukuma, delimitation, 847.

Ngoni, Bantu language group, 82.

Ngoni people: land alienated by Wabena to, 836; land reservation, 739-40; tribal organization, 454.

Ngoni-Ndebele, Transvaal Zulu dialect, 82.

Niger basin, physical features of, 3.

Niger canal project, 862.

Niger river: British penetration, 133; free navigation, Berlin Act, 1341; French irrigation enterprise, 1049-51; transport system, 1544, 1546-7.

Nigeria.

Abaja, taxation incidence, 580.

Abeokuta: land tenure, proposals of Egba Native Council, 854; land transfers, 854; taxation, assessment, 580.

Acquisition, history and cost, 1396-7.

AGRICULTURE:

average cultivation obligation, 772.

crops: cacao and cocoa—exports, 1397;

—native co-operative marketing, 1474;—native cultivation, 907;—

price dispute, 908; cotton—exports, 1397;—native cultivation, 905; fruit

—citrus, native cultivation, 917;—pineapple, experimental cultivation, 917; ginger, native cultivation, 890;

groundnuts—exports, 1397;—native cultivation, 898; maize, native cultivation, 892; oil-palm plantations, 771; palm oil and kernels, exports, 1327; palm products—co-operative marketing proposals, 1475;—export tax rebate, 912;—exports, 1397;—improvement work, 912;—native production, 912; penisetum, native cultivation, 893-4; piassava, native cultivation, 889; rice—experimental work, 895;—native cultivation, 895; rubber, 770;—European cultivation, 1016;—native cultivation, 1016; sesame, native cultivation, 899-900; sorghum, native cultivation, 893-4; tobacco, native cultivation, 917.

education: native, 967-8, 1247; schools, Yaba College (training course), 967.

European, rubber production, 919.

exchange visits by services, 957.

expenditure on, 1443.

inter-territorial conference, 957.

livestock: cattle, meat industry, 939; dairying, ghee, native production, 943; goats—breeding development, 940;—destructive feeding, 1104; hides and skins, 940; sheep, breeding introductions, 932; stock farms 976.

native: co-operation, 1474-5; crops, specialization in, 1425; government's development policy, 967-8; improvement impeded by land tenure systems, 854-5; mixed farming, 883, 963;—anti-erosion value, 1105;—water supplies and, 1046.

Nigeria—Agriculture (*cont.*)

official publications, 958.

policy: mixed farming, 883, 963, 1046, 1105; ploughs, use of, 1078.

research: 950-1; Empire Cotton Growing Corporation, contributions, 945; joint locust, with French authorities, 950.

soil deterioration: causes, 1104-5; desert conditions, 1103-4; *see also* under Nigeria, erosion.

veld burning, result, 1104.

Anglo-French Convention, effect on tariff policy, 1343.

Anthropological inquirers in, 47, 1614.

Aviation, *see* under Nigeria, transport.

Benin: land tenure systems, Islamic influence on, 832; taxation—assessment and incidence, 580;—income-tax assessment, 579.

Bornu: land tenure, native transfers under, 853; revenues, 427; taxation, income-tax assessment, 579.

Broadcasting, 1299.

Calabar, oil-palm selection work at, 951.

Census: taken, 117-18; and results (1931), 118.

Chambers of Commerce, representation on legislative council, 172.

Cinema, educational use, 1303.

Civil service: African appointments, 224; African employment in, 235; cost, 1351; emoluments, 1351.

Company administration, 1397.

Co-operation: 1474-5; cacao fermentations centres founded, 907; introduction, 907; native—credit and marketing facilities combined, 1474;—thrift and mutual aid societies, 1475.

Customs and excise, revenue, 1459.

Desiccation, study undertaken, 1000.

Docemo, chiefly house of Lagos, question of administrative employment of representative of, 520.

Economic system: capital—investment, 1318;—public listed, 1319; European share, 1397; native, specialization increasing, agricultural production, 1425; tariff policy, 135, 1343.

EDUCATION, NATIVE:

advisory committee, composition, 1238.

agricultural training facilities, 967-8.

expenditure on, 1443.

fees, school, rates, 1287.

Nigeria—Education, Native (*cont.*)

female: 1256; Moslem question, 1256.
finance, native contribution, 1241.
health propaganda cinema, 1302.
higher, 1249.

language policy, 1259.

medical: subordinate staff, 1190;
—course and diploma, 1184;—train-
ing at Yaba, 1183.

primary, 1245.

provincial committees, functions, 1239.

schools: agricultural—Ibadan, 1247;
—Samaru, 1247; girls, 1256; Kat-
sina College, technical training,
1247; King's College, Lagos, second-
ary course, 1245; middle, subjects
taught, 1245; native administration,
finance and management, 1241;
native authority, 1233; primary,
1245; Queen's College, 1256.

secondary, 1242, 1245.

teachers, training facilities, 1251.

vocational, 1245, 1247.

Yaba Higher College: 1248; agricul-
tural training, 967; courses and
standard, 1249; forestry training,
1002; medical course, 1183, 1184,
1249; teacher training, 1251.

Egba Native Council, land tenure, pro-
posals, 854.

Erosion: area affected, 1103; causes,
1104-5; control work, 1105; de-
forestation by tsetse-control burning,
1001.

Export duty, palm oil export tax, 912.

Exports: cocoa, 1397; columbite, 1502;
cotton, 1397; decline in value, 1328;
ginger, 890; groundnuts, 898, 1397;
gum arabic, 1015; hides and skins,
940; minerals, 1397; oranges, 917;
palm oil and kernels, 912, 1327,
1397; percentage—to France, 1330;—
to Germany, 1330;—to Great Britain,
1330;—to United States of America,
1330; piassava bark, 889-90; rubber,
919, 1016; sesame, 900; surplus over
imports, 1351.

Finance, public: capital—investment,
1318;—public listed, 1319; customs
and excise revenue, 1459; debt,
1443;—charges, 1351; expenditure,
1432;—debt charges, 1351;—pen-
sions, 1351;—roads, 1558-9;—social
services, 1434; grants-in-aid, 1320;
loan, redemption, 1324; mining re-

Nigeria—Finance, public (*cont.*)

venue, 1461; native tax revenue,
1458-9; railways, 1442-3, 1585-6;
revenue, 1442-3.

FORESTS: Anglo-French Commission,
findings and recommendations, 1104;
check list compiled, 1010; conserva-
tion, native authorities' duties, 1023;
deforestation, 1103;—areas affected,
1104-5;—by burning for tsetse-con-
trol, 1001;—in S. Provinces, 1000;
economic exploitation, 985; exotic
trees, introduction, 1012; forestry ser-
vice—African training, 1021;—staff
and training, 1002; investigation,
progress, 1011; products, rubber,
1016; reafforestation—departmental
work, 1001;—*taungya* system, 1000;—
reserves—area, 1000;—communal,
1001;—creation and administration,
1001;—native land tenure, effect on,
1000-1; Sahara, barrier problem,
999; sand penetration in north, 999;
savannah—area, 999;—belt reserva-
tion and planting in north, 999;
school, Ibadan proposal, 1002; use-
ful trees, study of, 1010; working
plans, 1011.

Franchise, qualification, 172.

Free Trade established, 135.

GOVERNMENT: legislative council, com-
position and sphere, 171-2; munici-
pal, 519-22; provincial, expenditure
on, 1443.

Hausa land tenure, family holdings, 853.

HEALTH AND MEDICINE:

British Empire Leprosy Relief Associa-
tion, workers maintained, 1141.

disease: leprosy, 1140;—government
organizations, 1142;—high incide-
nce, 1142; trypanosomiasis—con-
trol measures, mobile units, 1134;
—control measures, organization,
1168;—distribution, 1133-4; ven-
ereal cases treated (*table*), 1145;
yellow fever, endemic area, 1128.

dispensary system, 1168.

doctors, native, qualifications, 1184.

education, cinema used for, 1302.

health services: Colonial Development

Fund grant for native training centre,

1190; expenditure, 1443; mobile

medical units for trypanosomiasis,

1134; native—medical assistants,

training, 1249;—sanitary inspectors,

Nigeria—Health and Medicine (*cont.*)
 training, 1191;—subordinate staff, training, 1190;—training, 1183; organization, staff and expenditure, 1167-9; training for licentiates, 1184.
 hospitals: accommodation and patients, 1168; government, accommodation and patients, 1168-9; Ilesha, 1118; native administration, 1168.
 Medical Research Institute, yellow fever work, 1127-8.
 missionary work: 1118, 1168; leprosy, 1142.
 research: institutions, 1161; malignant diseases, 1151; provision, 1168; trypanosomiasis, 1623; yellow fever research laboratory, 1127.
 School of Pharmacy, Lagos, dispensers training course, 1190.
 Housing, responsibility for, 520.
 Ibadan: co-operative union, 1474; land tenure—native rights inquired into, 839; taxation, assessment in, 580; transfers made, 854; urban population, 1426.
 Ilo, revenues, 427.
 Import duties, customs revenue, 1442-3.
 Imports: government, 1340; percentage of British African, 1335; proportion of different, 1335; value per head of population, 1334.
 Industries: 1425-6; indigo dyeing, 1014.
 Judicial system: Alkali's court, 522; cases compared with Fr. W. Africa, 291; juvenile offenders, 313; Kano city, 521-2; land cases, native courts' powers, 773; native courts—appeals from, 288, 432;—competence, 288, 431, 773;—development, 420-1;—organization and powers, 431-2; penalties—compensation recognized in criminal procedure, 314;—corporal punishment, 312-13;—native courts' powers, 431; professional justice, retention, 301; South-Eastern Province, reorganization, principles followed, 425; Southern Provinces, historical evolution, 420-1; Supreme Court, position of, 420-1.
 Kano city: administration of, 521-2; judicial system, 522; urban population, 1426.
 Kano Emirate: desert conditions, dangers, 1104; land tenure—survey by

Nigeria—Kano Emirate (*cont.*)
 native administration, 959;—transfers, 853; revenue and expenditure of, 426-7; taxation—income-tax assessment, 579;—of land, and survey for, 853.
 Katsina, revenues of, 427.
 Labour: communal, regulations, 610; compulsory—railway construction, 615;—regulations, 619-20; disablement compensation, 677; employees, numbers, 607; employment conditions, 678; 'foreign contract' regulations, 658; hours' limitation, 678; industrial employment, 1427; recruitment through chiefs, 642; skilled employment, 692; welfare provisions, 677-8.
 Lagos: annexation of, reasons, 133; census, 117, 118; housing controlled by Executive Development Board, 520; municipality constituted, 519; population, native, 519; registration, native land titles, 1855-6; Town Council—composition and functions, 519-20;—revenue and expenditure, 519; urban population, 1426.
 LAND:
 concessions by King Docemo, 768.
 laws, term 'native' defined, 829.
 mineral prospecting, native lands, regulations, 1522.
 mineral rights, 1520.
 pressure on, 835.
 tenure: agricultural improvement impeded by native, 854-5; economic developments, effects on native custom, 853; effect of native, on forest reservation, 1000-1; government policy, 868; modifications in native customary, 853-6; Native Lands Acquisition Ordinance provisions, 855; Registration of Titles Ordinance (native) (1935) provisions, 855-6; Residents' conference, discussion on native, 855; system of Southern Province, 832; transfer restrictions of native customary, 853-6; transfers (native), administrative problem of, 854-6.
 Languages: 77, 91-4; Efik bureau, 91; Ibo translation bureau, 91; orthographics adopted, 80; research expedition to, 73; Zaria translation bureau, 93.

Nigeria (*cont.*)

Legislation: Co-operative Societies Ordinance, 1474; Governor's powers, 171; mining, 1502, 1526; Sleeping-Sickness Ordinance, compulsory treatment, 1134.

Libraries, native, 1294.

Meteorological service in, 15.

Minerals: columbite, 1502; diamonds, 1514; gold, 1501-2; prospecting in native lands, regulations, 1522; rights, ownership, 1520; tin, 1500-1.

MINES: Associated Tin Mines, gold prospecting, 1501; coal—development and production, 1502;—labour recruitment for, 642;—state enterprise, Enugu Colliery, 1516; gold—development, 1501-2;—production, 1502; labour disablement compensation, 677; railway construction for, 1585; regulations, 1526; revenue contribution, 1461; taxation, gold royalty, 1531; tin—development, 1501;—native employees, 1397;—native workings, 1500-1;—production, 1501;—resident labour, 497.

Missions: educational work, 1256; medical work, 1168; Roman Catholic, attitude to orthography, 91; Wesleyan Methodist Missionary Society, medical work, 1118.

NATIVE ADMINISTRATION: amalgamation of Northern and Southern Provinces, effects, 420-1. control of native authorities by administration, extent of, 430-1. differs from High Commission Territories, 242. Emirs, status of, in N. Nigeria, 419-20. executive orders issued by native authorities, 429. finance: allocation to native treasuries, 428; of Bornu, 427; of Ilo, 427; of Katsina, 427; of native authorities, 577-81; of Sokoto, 427; native treasuries—allocation of revenue to, 428;—importance of, 421-2;—grants to medical missions, leprosy work, 1142. indirect rule: application to pagan areas, 422-3; application in S. E. Provinces, difficulties, 423-4; historical development of, 416-19; Kano Emirate as example of, 426; success in Yoruba, 423-4; underlying principles formulated, 432-3.

Nigeria—Native Administration (*cont.*)

influence of, on other territories, 138. judicial system, *see under* Nigeria, judicial system.

land survey by, in Kano Emirate, 853.

legislation, subsidiary, native authorities' powers, 430.

local government, native councils, resources compared with Kenya, 392.

NATIVE AUTHORITIES: educational work and expenditure, 1241; forest rights, and powers, 1001; Ibadan cacao selection farm financed, 951; land alienation to alien natives, 855; powers, extent of, 429-30; powers of arrest, extent, 429; revenue, 577, 581; road maintenance, 1558; schools maintained, 1233; tax duties of, 579-80; urban areas, 521; well-sinking operations, 1047.

native cities, 520-2.

native treasuries and allocation of revenues, difficulties encountered, 428.

principles applied by Lord Lugard, 417-19.

prisons, 311.

social groupings investigated by Dr. Meek, 424.

taxation riots, 41, 581.

urban areas, 519-22.

'warrant chiefs' unsuccessful, 423-4.

Native cities: administration, 520-2; non-natives and stranger natives in policy, 521-2.

Niger African Traders, representation on legislative council, 172.

Non-native residents in native cities, jurisdiction, 521-2.

Oyo, taxation, assessment in, 580.

Public works, expenditure, 1443.

Railways: construction, 1584-5; Director of Transport, 1586; expenditure on, 1443; finance, 1442-3, 1585-6, 1600; Kano-Baro line, Niger connexion, 1544; Lagos-Ibadan line constructed, 1397; lines and mileage, 1584; mining development dependent on, 1501; reorganization, 1585-6; road transport competition, 1559, 1586; state system, 1585; trade increase by, 1397.

Roads: administration, 1558; Communications Board, functions, 1558;

Nigeria—Roads (*cont.*)

- competition with railways, 1559;
- construction and maintenance cost, 1558; expenditure on, 1558-9; mileage, 1558.
- Sokoto Emirate: Hausa centre, 28; revenues of, 427.
- Survey: employment of Africans, 9; geographical in Southern Provinces, 1046; geophysical for water supplies, 1047; Kano, Native Administration Department, 9; regional in Northern Provinces, 1000; water supply, concentration on, 1517.

TAXATION:

- land tax proposal, and land rights, 772.
- mining, gold royalty, 1531.
- native direct: 'Aba riots' against, in South-East, 41, 581; advantages of system, 582-3; assessment system contrasted with other African, 595-6; comparison with true income tax, 582; history prior to 1914, 576-7; incidence, flexibility, 582-3; income and profits tax defined, 578; income-tax assessment—appeal in emirates, 579;—appeal in South-West, 581;—in Bornu, 579; in Kano, 579;—method in emirates, 579;—in towns, 580;—in Western Provinces of S. Nigeria, 580; income-tax collection—in emirates, 579-80;—in South-West, 580-1; income tax incidence, 550;—in South-West, 580; income tax—introduced in Northern Nigeria, 577-8;—nature of, and land ownership, 772;—in S.E. provinces, 581-2; justifications for, 595; Koranic 'ushur', 771; livestock (*jangali*), 577-8, 589;—assessment and collection in emirates, 579; native authorities, and collection, 599; opposition to, 576-7; poll tax in pagan areas, 579; revenue from, 1458-9; system introduced—in north, 577;—in South-East, 581.
- non-native direct, income tax: 549-50; yield, 1443.
- trade: balance, 1351; market towns, 1397; Royal Niger Company's influence, 1397-8.

Transport:

- air: expenditure, 1601; facilities, 1600; local, Elders Colonial Lagos-Free-town service, 1600; trans-African,

Nigeria—Transport (*cont.*)

- Imperial Airways Lagos-Khartoum service, 15; 1597; 1600.
- Marine Department: 1545; river system, 1544-5.
- Urban population, 521, 1426.
- Vital statistics in, 118.
- Water supply: artesian resources and development, 1047; deficiency in Northern Provinces, 1046; domestic supplies in Southern Provinces, 1046; Geological Department's work, 1047; survey concentrated, 1517; well construction—in Northern Emirates, 1047-8;—in Southern Provinces, 1046.
- Dr. Westermann, visit of, 80.
- Witchcraft and magic, law on, 296.
- Yoruba Provinces: land system, misunderstanding by government, 837; land tenure, native customs studied, 839; land transfers recognized, 854.
- Zaria, Translation Bureau, 93.
- NIGERIA, COLONY:
 - land: alienation, 768; native rights, 769; sovereignty, 768-9; transfer, 768.
 - representation on legislative council, 172.
- NIGERIA, NORTHERN PROVINCES:
 - Agriculture, native: mixed farming, loans, co-operative societies, and, 1474; production increased by railways, 1608.
 - Census, 118.
 - 'Colonial' courts, diminished functions, 286.
 - Daudawa, Empire Cotton Growing Corporation farm, 945, 950.
 - Education, native, expenditure, 1241.
 - Erosion by wind, 1059.
 - Hausa distributed throughout, 28.
 - Health and Medicine:
 - disease: trypanosomiasis, compulsory treatment, 1134; venereal, prevalence reported, 1144.
 - services, field dispensaries for trypanosomiasis, 1134.
 - Land:
 - acquisition, regulations, 771-2.
 - alienation to alien natives, control by state, 828; leasehold, 774; occupied by natives, regulations and procedure, 824; by state, terms, 825-6.
 - British policy, 771.

Nigeria, Northern Provinces—Land (cont.)

Crown ownership, 773-4.

Emirs' rights, 771.

Fulani system, 771.

Islamic Maliki law, 771.

Koranic 'ushur', tax on produce, 771.

law, individual titles, prescription, 853.

native tenure: definition, 773; disposal, 773-4; individual titles, 853-4; Moslem law, rights of emirs, 833; native inquiries into, 839; occupations, census returns, 1425-6; population, 105; rent, 774; rights, security, 773-4.

occupation, conditions governing, 773. ownership, state as ultimate owner, 773-4.

policy, 771-3.

rent, Governor's control, 773.

rights claimed by state, 823.

sovereignty defined, 772-3.

tax on, considered, 772.

Municipal government, townships, constitution and competence, 520-1.

Native administration: amalgamation with Southern; effect on, 420-1; organization, 426-7; revenue and expenditure of native authorities, 426-7.

Population: increase, problem, 1063; density of, 2.

Railways, groundnut cultivation extended, 1608.

Samaru agricultural research laboratories, 950.

Urbanization of native population, 1426.

NIGERIA, SOUTH-EASTERN PROVINCE: judicial system reorganization, principles followed, 425; native administration, principles followed in reorganization, 424; reorganization, initial results, 425.**NIGERIA, SOUTHERN PROVINCES:**

Benin sands research, 950.

Education, native administrations' work and finance, 1241.

Forest flora, study of, by J. D. Kennedy, 1010.

Health and medicine, disease, plague, minor outbreaks, 1135.

Judicial system, historical evolution, 420-1.

Nigeria, Southern Provinces (cont.)

Ibadan: agricultural research laboratories, 950; native authority finances cacao selection farm, 951.

Land:

alienation control, to non-natives, 769-70.

concessions: 769; Leverhulme application, 770; policy considered, 770-1.

Crown, definition, 770.

native rights and grants, 769-71.

tenure: native custom, inquiries, 839-40; native customary, changes described, 854-6.

Municipal government, townships, constitution and competence, 520-1.

Native administration: amalgamation, with Northern, effect on, 420-1; organization, 428; revenue and expenditure of native authorities, 428.

Native population: density, 2; occupations, census returns, 1426; urbanization of, 1426.

Representation on legislative council, 172.

Soil research, 950.

Tsetse-fly infestation, 1129.

Nigeria, *see also under* British West Africa.

Nigritic language, 76.

Nile river: irrigation from, 1025; reservoir, 4; soil deposits, 1060; source of, 4.

Nilo-Hamitic language group, 77.

Nilo-Hamitic people: description of, 29; Teso, 88.

Nilo-Sudanic language group, 77.

Nilotes people, description of, 29.

Nilotic language group, 75, 77, 88.

Nilotic tribes, negro influence on, 19.

Nkole people, political organization in Lacustrine kingdoms, 23-4.

Nkunku people, tree propagation methods, 1008.

Nordwest Kamerun Gesellschaft, concession obtained, 788.

North Charterland Exploration Company: concession in N. Rhodesia, 738; native land reservation case, 739.

North-West Cameroon Concession, position in Cameroons under Germans, 774.

Northern Province News (Nigeria), vernacular (part) publication, 1295.**Northern Rhodesia.**

Abercorn coffee research station, 948.

Northern Rhodesia (*cont.*)

African Literature Committee, 87.

AGRICULTURE:

- crops: beeswax, native production, 891; coffee, Abercorn Co-operative Society, marketing, 1469; cotton—European production, 922, 923;—native cultivation, 903; groundnuts, native production, 897; maize—Control Board, 1387;—co-operation, N.W. Rhodesia Farmers Co-operative Society, 1469;—European production, 1387;—exports, 1387;—native cultivation, 892, 1387; millets, native cultivation, 893; rice, native cultivation, 894; tobacco—European production, 925;—N. Rhodesia Tobacco Corporation, 1469; wheat, 921, 1387.
- European: coffee, 923; cotton, 922; extent, 919; maize, 921; numbers engaged in, 1387; tobacco, 925;—N. Rhodesia Tobacco Corporation, 1469; wheat, 921.
- inter-territorial conferences, 957.
- labour conditions, 675-6.
- livestock: cattle—markets for, 1387;—meat industry, 938;—quarantine regulations and market for, 937; co-operation, N. Rhodesia Livestock Society, 1469; dairying, 942; dipping, provision for, 974; hides and skins, 940; native training facilities, 977-8; neglect punishable, 660.
- marketing, co-operative organizations, 1469.
- native: *chitemene* system, 879-80; deforestation, 1088; peasant farming, evolution, 847; shifting cultivation, 22; *see also under* Agriculture, native (*chitemene*).
- organization: coffee, 923; cotton, 922; maize, 921; tobacco, 925.
- research: 947-8; ecological survey, 954; Empire Cotton Growing Corporation, 945; stations, 1088-9.
- Anthropological inquiries in, 48.
- Aviation, *see under* Northern Rhodesia, transport (air).
- Berlin Act, 1341.
- Broken Hill: mining companies, native employees, living conditions, 514; native compounds, 512.
- Civil service: conditions of service, 225;

- Northern Rhodesia—Civil service (*cont.*) graduates from Union of S. Africa universities employed, 1210-11.
- Concessions: copper mining, 1495-6; teak forests exploitation, 993.
- Co-operation: agriculture, tobacco, 925; creamery at Lusaka, 942; European, 1469; native, 1471-2.
- Customs and excise revenue, 1459.
- Economic system: copperbelt, importance, 1388; native—cash crop developments, 1420;—crafts, decline, 1419-20;—trade, Asiatic control, 1419;—trade developments, 1419-20.
- EDUCATION, EUROPEAN: 1259; scholarships and bursaries, 1259; secondary, 1259-60; technical schools, 1259.
- EDUCATION, NATIVE: advisory body, composition, 1239.
- copperbelt population, 675.
- fees, 1287.
- female, 1255-6.
- Inter-territorial Conference, 86.
- medical subordinate staff, 1188.
- school committees, composition and functions, 1239.
- schools: Jeanes—female training, 1256;—Mazubuka, 1250, 1252; missionary, Mbereshi, nurses trained, 1255-6; Trades School, Lusaka, subjects taught, 1246; urban natives, 513.
- teachers, training facilities, 1250.
- vernacular school books, 86.
- vocational, 1246.
- Erosion, control measures, 1088.
- European: interests in, 460-1; population, 460; settlement, areas and considerations affecting, 1387-8.
- EXPORTS: cobalt, 1388; copper, 1327, 1388;—to Germany, 1330; gold, 1388; hides and skins, 940; maize, 921, 1387; percentage—Germany, 1330;—Great Britain, 1330; timber, 1388; tobacco, 925; value (1936), 1388; vanadium, 1388; wheat, 921; zinc, 1330, 1388.
- FINANCE, PUBLIC: budgetary position under Company, and Imperial Government, 1436-7.
- Colonial Development Fund loan, 1438.
- debt: 1438;—charges, 1350.
- expenditure: 1432; debt charges, 1350;

Northern Rhodesia—Finance, Public *(cont.)*

pensions, 1350; roads, 1553; social services, 1434.

inquiry commission, 1437.

revenue: customs and excise, 1459; decline, 1437; mining, 1461; native tax, 1458; non-native direct tax, 1459.

Standing Finance Committee, composition of, 171.

FORESTS: afforestation work, 993-4; control, 994; deforestation, 993-4; exotic trees, introduction, 1012; forestry service, staff, 994; fuel requirements, effects, 994; industrial exploitation, 993; mining companies and timber cutting, 993; reserves, 994; survey—aerial, 1011;—ecological, 1010;—need of, 994; teak, concessionary exploitation, effects, 993; timber exports, 1388.

Franchise qualification, 170.

Government: closer union with E. Africa, question, 167; East African federation proposed, 181-2; executive council, 170; legislative council, 170;—and native representation, 171; representative institutions and indirect rule, problem of reconciling, 1640; union with Nyasaland, criticisms of plan, 180; union with S. Rhodesia—conference on terms, 181;—historical review of question, 179;—native policy in relation to, 180;—request for conference, 180;—Royal Commission of Inquiry appointed, 181.

HEALTH AND MEDICINE:

disease: helminths, incidence among labour recruits, 1147; pneumonia, prevalence, 1150-1; silicosis, not prevalent, 1150.

health services: inadequate provision, 1162; native subordinate staff, training, 1188; organization, staff and expenditure, 1162-3.

hospitals and dispensaries: accommodation and patients, 1162-3; Colonial Development Fund grant, 1162; mining companies, 1162; native urban, 513.

missionary work, 1117, 1118, 1119.

surveys, need for emphasized by Sir A. W. Pim, 1152.

Northern Rhodesia (cont.)

Housing, native: Industrial Labour Advisory Board recommendations, 514; mining population, 514-15; model villages, 513-14; urban natives, 512-13.

Import duties, customs tariff basis, 1344.

Imports: proportion of British African, 1335;—and of different, 1334; timber, 993; value per head of population, 1334; wheat, 1387.

Industries: metal, 1536; native manufactures, decline, 1420-1.

Judicial system: Court of Appeal, proposal for joint, 285; native courts—appeals from, 288;—attempted separation of powers, 287;—established, 456.

LABOUR:

Agreement with S. Rhodesia, 654.

colour-bar: on railways, 691; question, 132.

mines, silicosis not prevalent, 1150.

native: agricultural conditions, 675-6; communal labour, Barotse chiefs' rights, 610; compulsory agricultural production, powers, 631; compulsory labour, regulations, 617-18; contract, duration, 693; employees, 606-7, 1389;—outside territory, 1389; migration, 701, 1380; private employment, recruitment organizations and rules, 654, 656; recruitment—chiefs, position, 649;—Katanga mines, 645; recruits, Rhokana Corporation, helminth incidence, 1147; registration system, 670; stabilization in copperbelt, 649; tax defaulters, payment by work, 620-1; tax relief works, 565; taxation of, 564; welfare, work and regulations, 675-6.

offences, penalties, 660.

ratio of European and native, 691.

wages: rates, 691-2; reduction by depression, 693.

LAND:

alienation: Barotseland reserved, 739; British control, 739; British South Africa Company's grants, 738; companies titles, 739; native Trust Land, 741.

allocation, 741.

concessions under Company rule, 738.

Northern Rhodesia—Land (*cont.*)

Crown: 741-2; control, 739.
labour farm tenants, 741.
mineral rights, ownership, 1519.
native: acquisition, 740; leasing, 741;
mineral prospecting, regulations,
1521; reserves—Crown and Com-
pany loans for, 740;—delimitation,
739-41;—development recommenda-
tions, 810-11;—judicial decision on
areas under Company control, 739;
—native transfer to, 740-1;—non-
native land acquisition in, 740;—
population congestion, 810;—water
supplies, 810; trust land—aliena-
tion, 741;—description, 741.
non-native areas, 741-2.

tenure: native customary—changes,
847;—family holdings, closer demar-
cation, 847; native individual titles,
administration's policy, 847; native
systems, 831.

Language: 85-7; Provincial Com-
missioners Conference and, 86.

Legislation: land rights, 741-2; un-
official opinion consulted, 170-1.

Liquor, native, control, 515.

Livingstone, municipal native com-
pounds, 512.

Luanshaya, native compounds, 512.

Lunzua, native agricultural research
station, 948.

Lusaka: model native village, 513-14;
native compounds, 512.

Magistrates, extensive competence of,
285-6.

Marketing: co-operative, coffee, 923;
maize regulation, 461.

Matrilineal tribes, initiation cere-
monies, 24.

Mazabuka: Empire Cotton Growing
Corporation station at, 945; research
laboratories, 947-8.

Meteorological Service in, 15.

MINERALS: bismuth production, 1496;
cobalt production, 1496; copper—
exports, 1327;—field adjoining Bel-
gian Congo, 1506;—industrial treat-
ment, 1536;—production, 1496; ex-
ports, 1388; gold production, 1496;
lead production, 1496; manganese
production, 1496; metal industry,
1536; mica production, 1496; pros-
pecting, native lands, regulations,
1521; rights, ownership, 1519; silver

Northern Rhodesia—Minerals (*cont.*)

production, 1496; tin production,
1496; vanadium production, 1496;
zinc—production, 1496;—refinery,
1536.

MINES:

copper: capital investment, 1322;
development, 1495-6; labour—resi-
dent, 497;—supply, organization,
654; Luangwa Concessions, 1495;
Nkana, 1496; production, 1496;
revenue contribution, 1437-8; Rho-
desia Mineral Concession, 1495-6;
Rhodesian-Congo Border Conces-
sions, 1495; Rhokana Corporation,
1495; Roan Antelope, 1496; royalty
system on price basis, 1531.

copperbelt: anti-malaria measures,
1126; rioting, causes, 564.

development: expenditure, 1496; sum-
mary and conclusions, 1660.

industry, effect on population, 460.

labour: accident and disease rate, 675;
European employees, 1388; hospital
provision, 1162; native employees—
conditions, 675;—numbers, 1388;—
tribal elders appointed, 514-15;—
wages, 691-2; silicosis not prevalent,
1150; stabilization in copperbelt,
649.

native population, housing, 514-15.

native workings, 1485.

regulations, penalties for breach,
660-1.

revenue contribution, 1461.

Rhokana Corporation: labour recruits,
helminth infestation, 1147; loan to,
1438.

Roan Antelope Mine, native em-
ployees, living conditions, 514.

royalties question, 1437.

timber cutting concessions, 993.

Missions: educational work, 1250,
1255-6; hospitals maintained, 1162;
Jesuit, 86, 1119; White Fathers,
medical work, 1118.

Native Administration: chiefs, position
of, 454-5; Conference of administra-
tive officers (1927), recommenda-
tion, 453; direct rule by Chartered
Company, 452-3; finance, recom-
mendations by Sir A. W. Pim, 455;
financial responsibility, extent, of na-
tive authorities, 454-5; hospital pro-
vision, 513; housing—mining popula-

Northern Rhodesia—Native Administration (*cont.*)

tions, 514-15;—model villages, 513-14; Industrial Labour Board and central native authority, 513; liquor control, 515; mining employees, management, 514-15; municipal locations, regulations, 512; native authorities and courts constituted (1929), 453; Native Authority Ordinance, powers conferred, 453; native courts, *see under* N. Rhodesia, judicial system; native treasuries, revenue from land alienation, 741; official organization for, 461; policy—co-ordinated by Provincial Commissioners, 227;—Sir J. Maxwell's, 453; provisions for, under Proclamation of 1916, 453; reserves, recommendations of commissioners for delimitating, 453; revenues of native authorities, 454-5; schools, urban provisions, 513; urban areas, native authorities in, 513; urban natives, 512-15;—housing, 512-13;—model villages, 513-14;—population estimates, 512.

Native Labour Association, labour recruitment organization, 654.

Native status, 170.

Ndola, municipal native compounds, 512.

Population: density, variations, 1088; enumeration, 112; European and natives, ratio, 1388; urban natives, estimates, 512.

Press, vernacular publication, 86, 1295.

Railways: branch lines, mileage and areas served, 1575; financial control, 1608; system, operation with S. Rhodesia, 1571; *see also under* Southern Rhodesia, railways.

Rhodes Livingstone Memorial Institute: government anthropologist for, 54; work and aims, 1621.

Rhodesia Native Labour Bureau, labour recruitment agency, 654.

Roads: character, 1553; control, Public Works Dept., 1553; finance, 1553; motor services, 1553-4; routes and mileage, 1553; secondary, 1553; Zambesi bridge project, 1553.

S. Rhodesian labour recruited from, 653.

Survey: ecological, 1088-9; geodetic,

Northern Rhodesia (*cont.*)

7; importance of, 5; mining combines and, 1516.

TAXATION:

mining, 1437-8.

native direct: beeswax sales to defray, 891; collection system, 565; defaulters—liquidation of debt by labour, 620;—treatment of, 565; hut tax, 563; incidence, effect on native life, 564; payment, 564; poll tax, 563; rate revised, 563-4; reform recommended, 564-5; revenue from, 1458; rioting due to increase of, 564; wives, 563.

non-native direct: income tax, 549-50; personal tax, 550; revenue, 1459.

Trade: Asiatics engaged in, 1419; balance, 1350; barter system, 1420; native—Asiatic control, 1419;—hawkers, licences, 1420; stores, European, activities, 1419-20.

Transport: air—local, Rhodesia Nyasaland Airways, 1599-1600;—subsidy, Imperial Airways, 1601.

Tribal organization in, 452-4.

Tsetse fly: distribution, 1129; effect on overstocking, 1087-9.

Water supply: artesian sources, 1040; boreholes, 1040; dams, 1040; development staff, 1040; expenditure, 1040; reserves, deficient, 810.

Witchcraft and magic, law, 296.

Northern Rhodesia.

BAROTSELAND:

air transport, special value, 1602.

British South Africa Company, position in, 457.

constitution, historical antecedents, 457.

education, native: Board, composition and functions, 1239; schools, National School, industrial training, 1246; vocational, 1246.

Kgotla, position and powers, 457.

land, alienation prohibited, 739.

language in, 86.

Lozi tribe, rule of, 456-7.

minerals, prospecting excluded, 1521.

native administration: 456-60;

Barotse Trust Fund, revenue and administration, 458; comparative study, 416; financial arrangements

Northern Rhodesia—Barotseland (*cont.*)

with paramount, 459; native authorities, revised status and powers, 459-60; native courts, revised constitution and jurisdiction, 459-60; native society, political organization, 456-7; paramount chief, powers of civil and criminal proceedings, 458; revenues, administration of, revised system, 459-60; revision of system of government (1936), 458.

native area, 739.

paramount chief, status of, 456-7.

physical features of, 4.

political organization centralized in, 24.

population, European, numbers, 456.

Sikalú, position and functions, 457.

treaty rights and land tenure, 833.

union of N. and S. Rhodesia, question of, 181.

Central Province: deforestation, 1087.

Southern Province: maize cultivation and erosion, 1087.

Northey circulars, *see under* Kenya, labour (native).

Norway, Berlin Act signatory, 1341.

Notices statistiques sur les colonies françaises, population estimates in, 122.

Ntara, Samuel Y., author of *Man of Africa*, 87.

Nuba-Fula language group, 74.

Nuer language, 77.

Nupe language, 76, 92.

NUTRITION:

African natural resources, 883.

bananas and plantains as native food, 901.

Belgian Congo: companies work on, 1180; regulations, 680.

Bureau of Nutrition (Great Britain), work, 1160.

cassava, food value, 895-6.

coco-yams, food value, 897.

Committee (Great Britain): constitution and functions, 1160; research co-ordination, 1625.

conference, nutrition research, 1626.

deficiency: connexion with soil deficiency and disease, summary, 1666; diseases caused by, 1123; extent in Africa, 1123; leprosy associated with, 1140.

departmental co-operation for improvement, 1197.

Nutrition (*cont.*)

dietaries, African: calcium and phosphate contents, 1123;—poisonous elements, 1123; information on, needed, 1122; labour, 1124;—interest of industrial concerns, 1194;—regulations, 1199; protein content, 1123; study, Br. E. Africa, 1123.

Dietetic Committee (Great Britain), work, 1625.

food crops, 888-91.

game as food supply, 887.

health maintenance and, 1114-15.

helminth infection through, 1146-7.

improvement: leprosy, eradication possibility by, 1141; tuberculosis susceptibility reduced, 1140.

infants, deficient diets, 1123.

inquiries into: 1122; Kenya, 1124;

Nigeria, 1124; Uganda, mutala surveys, 954.

labour efficiency and question of, 697.

livestock products, attempts to increase consumption, 1069-70.

malnutrition: helminth infestation, influence on, 1146; rural areas, 1205; widespread, 961.

meat, Nigeria and Gold Coast consumption, 939.

millet flour, use of, 888, 893-4.

native diet, 883, 888, 1122.

Nigeria, regulations in health areas, 677.

N. Rhodesian native employees, 675.

Nyasaland: inquiry, 1620; regulation, 676.

palm oil, dietetic value, 913.

pulses, place in, 900.

regulations on Rand mines, 673.

research: co-operation, 1611; Food Investigation Board, 1619; food preservation, 1619; organization, 1613, 1618-19; subjects for inquiry, 1612, 1613.

rice, 894-5.

sesame, use of, 899.

S. Rhodesian mine workers, 674.

standard of, based on native production, 980.

vitamin A deficiency, consequences, 1123.

wild plants as constituents of, 889.

Nyarubanja, native land tenure, 441, 830, 848.

Nyamwezi language, 88.

Nyamwezi people, political struggles in Tanganyika, 23.
Nyanja language: 85-6, 87; books in, 87; orthography, 81.

Nyasaland.

AGRICULTURE:

burning, control proposed, 1090.
conferences, interterritorial, 957.

crops: coffee—European production, 923;—native cultivation, 909; cotton—European production, 922-3;—native production, 903, 922-3; groundnuts, native cultivation, 897; maize, native cultivation, 892; millets, native cultivation, 893; rice, native cultivation, 894; tea, European production, 924; tobacco;—European cultivation, 915-16, 925-6;—exports, 1327;—market for, 916, 1386;—native cultivation, 915-16, 925.

dominant industry, 1386.

European: coffee, 923; cotton, 922-3; government assistance, 1386; tea, 924; tobacco, 925-6.

extent, 919.

livestock: hides and skins, 940; meat industry, 938-9; stock-breeding, castration, 976.

native: compulsory cash crop production, 631; cotton, 903, 922-3; native demonstrators, training, 966; shifting cultivation, 22; tobacco, 915-16, 925.

organization, tea growing, 924.

ploughs, Agricultural Department's policy towards, 1078.

research: 948; Empire Cotton Growing Corporation, 945.

Berlin Act includes, 1341.

Capital, public listed, 1319.

Chartered Company of, 1313.

Chilembwe rising, 758.

Cholo district, tea production, 924.

Civil service, conditions of service, 225.

Company development, 1385.

Co-operation, native, no organization, 1472.

Domira Bay, Empire Cotton Growing Corporation station, 945.

Economic system: European—agricultural character, 1386;—natives dependent on, 1393; free trade established, 135.

Nyasaland (cont.)

EDUCATION:

Department and vernacular, 87.

European, 1260.

native: advisory committee, composition, 1238; agricultural demonstrators, training, 966; compulsory, areas applicable, 1239-40; departmental training courses, 1246; female, 1256; hygiene, training, 1163; interterritorial conference, 86; language medium, 1258; medical subordinate staff, 1188; native authorities' training, 1257; schools, Jeanes, 1257;—teacher training, 1251;—vocational training, 1248;—Zomba, 1252; schools, missionary, state aid, 1233; teachers, training facilities, 1251; vocational, 1246, 1248.

Erosion: control—measures, 1090;—recommendations by departmental committee, 1090; extent of, 1089-90; soil losses, 1058, 1089.

European settlement, effect on native administration, 462.

Exodus into, from Portuguese territory, 639.

Exports: agricultural produce, 1386; cattle, slaughter, 938; hides and skins, 940; percentage to Great Britain, 1329; tea, 924; timber, 995; tobacco, 916, 1317.

Finance, public: budgetary problem, 1438; customs revenue, 1438; debt, 1438-9;—imperial assistance, 1577; expenditure, 1438;—debt charges, 1350;—pensions, 1350;—social services, 1434; grant-in-aid from imperial government, 1438; loans and grants, imperial, 1447; native tax revenue, 1458; non-native direct tax revenue, 1459; railways—assistance, 1577;—loans granted, 1577; revenue—main heads, 1438;—'standard', 1438-9.

Forests: area, 994; exotic trees, experiments in, 1012; forestry staff, numbers and training, 995; investigation, progress, 1010-11; legislative control, 995; native authorities, areas under control, 995; reafforestation as anti-erosion measure, 1089-90; research, 995; reserves area, 994;—scheduled, 1090; village forests, 1023-4;—areas, purpose and scope, 994-5;—working plans, 1011.

Nyasaland (*cont.*)

Government: Closer Union—question, 167;—with Rhodesias, Royal Commission of inquiry appointed, 181; East African federation proposed, 181-2; European control, 1385; executive council, composition, 163; indirect rule and difficulties of application, 462;—policy initiated, 465; legislative council, composition, 163; native policy, developments, 464-5; union with N. Rhodesia, Commission on Closer Union criticizes plan, 180.

Health and medicine: Colonial Development Fund grant, 1163; disease—helminth incidence, 1147;—leprosy cases treated, 1142; government grants, leprosy clinics, medical missions, 1142; health services—native subordinate staff, training, 1188;—organization, staff and expenditure, 1163-4; hospitals and dispensaries, accommodation and patients, 1163-4; medical missions' leprosy clinics, 1142; mission work, 1117-18; Native Welfare Committee, 1197.

Imports: cotton piece goods, Great Britain, proportion of total, 1336; government, 1339-40; Japan, percentage, 1337; proportion of Br. African, 1335; proportion of different, 1335; timber, 995; value per head of population, 1134.

Infant mortality, 128.

Judicial system: Court of Appeal, proposal for joint, 285; native courts—appeals from, 288;—instituted (1929), 463-4.

Karonga, helminths, high incidence, 1147.

Kuweraza district, helminth infestation, study made, 1147.

Labour:

Agreement with S. Rhodesia, 654.
Committee on Emigrant (1935), 648.

native: compulsory labour—regulations, 615, 618;—white settlers' claims to customary labour, 756; employees, numbers, 607; migration, 701-2, 707, 1386;—inquiry, 1614;—land question and, 759;—question and taxation, 566-7;—to S. Rhodesia, 1380; offences—penalties, 660;—statistics, 662; pass system, 670;

Nyasaland—Labour (*cont.*)

Tangata, labour rent on estates, 758; tax relief works, 566; welfare work, 676.

LAND:

alienation: 1385; area affected, 756; chiefs' powers, 755-6; native residents in concession areas, 756; native rights in European areas, 758; redemption of areas recommended, 757; restriction, 757; by state, terms, 825, 826.

Commission on land question, 756-7.
concessions: acquisition prior to Protectorate, 755; area affected, 756; Crown control, 755-6; title settlement, 755-6.

Crown: definition, 756;—under Native Trust Land Order in Council (1936), 757.

East Africa Commission's recommendations, 757.

European settlement area, Commission's recommendations, 757.

immigrant native residents, 759.

laws, term 'native' defined, 829.

leases, duration, 757.

native: mineral prospecting regulations, 1521; Natives on Private Estates Ordinance (1928), 758; rights in alienated areas, 758; Trust Land, administration, 757.
private estates, native residents on, 758-9.

rent: labour in lieu of, 758; native liability in alienated areas, 758; Tangata system, 758.

reserved, definition, 757.

tenure, native customary: effect of economic conditions, 847; information available on, 898.

use, programmes, supervision by special officer, 1090.

Language: 87; vernacular policy, 87.

Map production, 1041.

Marimba district, land tenure, native, transfers, 847.

Meteorological services in, 15.

Minerals: bauxite deposits, 1496-7; prospecting on native lands, regulations, 1521.

Mines: rights, 1497.

Missions: educational work, 1233, 1251; Livingstonia established, 1385; medical work, 1163; native medical training, 1188; vocational training, 1246.

Nyasaland (*cont.*)

Mlanje district: coffee plantations, 923; helminths, low incidence, 1147; tea—production, 924;—research station, 948.

Native administration: councils, composition and competence, 463; councils instituted for local government (1912), 462-3; educational work, 1239-40; European settlement, effect on, 462; headmen, appointment and competence, 463; local native councils under 1912 Ordinance, 462-3; native authorities—forest control, 995;—land alienation control, 757;—under 1933 Ordinances, 464-5; native courts, *see under* Nyasaland, judicial system; native settlement on European estates as affecting, 463; native treasuries instituted, revenue and expenditure, 464-5; Secretary for Native Affairs, appointment abolished, 227; self-government developments, 465; system reorganized (1933), 464-5; tribal disintegration affecting organization, 462; urban native, residential regulations, 515.

Native Welfare Committee: composition and work, 1197; erosion control work, 1090.

Native Welfare Department, functions, 1163.

Northern: child mortality caused by helminths, 1147; land tenure, native systems, 831.

Population: 112-13, 1385; density and erosion, 1089; native occupational, 1393; rainfall and distribution of, 1040-1; survey, 113.

Port Herald: agricultural research station, 948; helminth incidence, 1147.

Railways: development, reasons, 1604; finance, 1447, 1577-8, 1605; government guarantees, 1577; lines, construction, 1576-7; management, 1577; mileage, 1576; Nyasaland Railways, Ltd., formation, 1577; Trans-Zambesia line, 1577; Zambesi bridge question, 1577.

Rand labour recruited, 652.

Roads: 'all-weather' and 'seasonal', 1554; mileage, 1554; Roads Transport Ordinance, provisions, 1554; routes, 1554.

Shire highlands: deforestation and

Nyasaland—Shire highlands (*cont.*)

erosion, 1089; medical missionary work, 1116-17; reduced fertility, 1063.

Shire river: silting up, 1089; system, 3.

Soils, severe losses, 1089.

S. Rhodesian labour recruited, 653.

Taxation:

native direct: allocation of, 567; collection system, 567; default, penalties, 566; district officers and direct collection, 462; Emigrant Labour Committee's recommendations, 566-7; emigration due to, 566-7; exemption of non-residents, 567; hut tax, rate and liability, 566; incidence, 566-7; payment, 566; poll tax, rate, 566; revenue, 1438, 1458.

non-native direct: income tax, 549, 550; personal tax, 550; poll tax, 550; revenue from, 1459.

tea cess, 924.

Trade balance, 1350.

Transport: economic growth dependent on, 1380; improvement, 1541, 1608.

Vital statistics in Fort Manning district, 113.

Water supply: boreholes, 1041; development work, 1041; drinking-water, provision, 1041; Geological Survey Dept. and development, 1040; maps compiled, 1041; rainfall in relation to, 1040-1; rivers, disappearance, 1061; wells, 1041.

West Nyasa, land tenure native, transfers, 847.

White settlement: Land Occupation Commission's recommendations (1921), 757; land questions caused by, 756-7.

Zambesi bridge, finance, 1447.

Zomba: agricultural research, 948; helminths, low incidence, 1147; soil loss, 1089.

Nyoro language, 88.

Nyoro people, political organization in Lacustrine kingdoms, 23-4.

Nzima language, 94.

O

Oba of Benin, land control powers, 769.

Office International d'Hygiène Publique, organization and composition, 1616.

Office Météorologique Internationale, Regional Commission no. 1, 16.

Ogoni language, 91.
 Okavango river, silting-up and clearing operations, 1036-7.
 Oldham, Dr. J. H., and Gibson, B. D., authors of *The Remaking of Man in Africa*, quoted, 1242.
 Oliver, R. A. C., intelligence test for Africans, 39.
 Oman, Sultan of, transfers court to Zanzibar, 317.
 Onderstepoort veterinary laboratories, *see under* Union of S. Africa, agriculture (research).
 Onitsha language, 92.
 Orange Free State, *see under* Union of S. Africa.
 Orange river, system, 4.
 Ormsby-Gore, Rt. Hon. W. G. A.: chairman of East Africa Commission, 181-2; compulsory native production, views quoted, 1403; education in W. Africa, criticism of, 1244; transport costs, comparative, 1540; visit to W. Africa, Nigerian development recommendations, 770.
 Orthography, *see under* Language.
 Otraco, *see under* Belgian Congo, industrial concerns.
 Ottawa, Imperial Conference, Union of S. Africa policy, 1343.
 Overstocking, *see under* Agriculture, livestock.

P

Pacage, livestock tax in French dependencies, 589.
 Palestine, erosion in, 1071.
 Pan African Health Conferences, *see under* Health and Medicine, conferences.
 Park, Mungo, 1310.
 Parker, Dr. P., American medical missionary, 1116.
 Parliamentary Papers, *see under* Great Britain.
 Pass Laws, *see under* Labour, native, and territories.
 Passfield, Lord, Statement of Conclusions on closer union in E. Africa, 183.
 Peoples of Africa: 18-21; comparative mental capacity, 36-40; derivation and classification, summary, 1637; ethnic classification, 32-40; intelligence tests, 38-40, 1638-9; life and custom, importance of study, 40-2; magic, im-

portance of, 30-2; physical characteristics—blood-groups, 34-5;—cephalic indices, 35-6;—surveys, 34-5; religious beliefs common to, 29-32; social concepts common to, 29-31.
 Perham, Miss M. F., history of indirect rule in Nigeria, 416.
 Persson, J. A., Tswa grammar, 83.
 Pettit, Dr. A., yellow fever preventive inoculation, 1129.
 Phelps-Stokes Commission: Jeanes schools, recommendations, 1228; teacher training recommendations, 1252.
 Philip, Dr., conflict with settlers over native policy, 1216.
 Phillips, Dr. C. R., medical survey by, 116.
 Philology, 68; *see also under* Language, institutions, studies.
 Phonology, 99-100.
 du Picq, Col. Ardant, collection of Dyerma texts, 95.
 Pigs, *see under* Agriculture, livestock.
 Pijper, Dr. A., typhus fever research, 1137.
 PIM, SIR A. W.:
 Basutoland inquiry and recommendations: 394; administrative reform, 399; Afrikaner cattle for breeding purposes, 975; erosion control, 1084; land tenure, 867; native taxation system reform, 559-60.
 Bechuanaland inquiry, recommendations: air services, extension, 1599; tax collection system, reform, 561; water supplies, 1037.
 High Commission Territories, stock-breeding in, comments, 975.
 Kenya: civil service organization in, criticisms, 229; coffee research recommendations, 949; co-operation native, recommendations, 1473; financial inquiry, 1440; income tax advocated, 551; native councils, views, 391-2; native tax—age of liability considered, 573-4;—collection system, recommendations, 573;—hut tax on women, recommendations, 574; railway debt, recommendations, 1441, 1582.
 Northern Rhodesia: financial inquiry, 1437; recommendations—medical surveys, 1152;—native authorities in urban areas, 513;—native authorities,

Pim, Sir A. W.—Northern Rhodesia
(*cont.*)

finance, 455;—native reserves, extension and development, 810–11;—taxation, 564–5.

Swaziland: cattle tax recommended, 973; irrigation plan, criticisms, 1038; land tax proposal, 549; mining concessions, views, 1525.

Pirie, Dr. J. Harvey, anti-plague inoculation research, 1136.

Pirow, the Hon. O.: approves uniform policy for white settlement areas, 132; views on neutrality of Union of S. Africa, 147.

Pitso, native council, N. Rhodesia, 394, 457.

Plaatje, S. T., translation of Shakespeare into Tswana, 83.

Pole-Evans, Dr. I. B., grass breeding, work by, 1068.

Polygamy, effect of on population, 128.

Ponty, W., Governor-General of Fr. W. Africa: military service plan, 627; native administration criticized, 487.

Poor Whites, *see under* Union of S. Africa.

Population.

accuracy of records, 125–6.

Africa's capacity, 124–5.

Basutoland, increase, 1084.

Belgian Congo: 105; decrease, 120; depopulation, 105; enumeration system, 120–1; National Colonial Congress and depopulation, 105; *Foréami* work, 121.

birth-rate, 127–8; *see also* Vital Statistics.

Cameroons, Fr. Mand., 123–4.

Cape Province records, 110.

census, *see* Census.

classification: census purposes, 126; Union of S. Africa, 145.

coloured, Union of S. Africa, 1363.

congestion in Basutoland, 729.

density: 1–2; comparative, 2; connexion with soil deficiency, 1666; effect on labour supply, 694–5; forest destruction caused, 1024; formation of land customs, 835; Kenya native reserves, 811; low, cause, 2; N. Rhodesia, 1088;—ecological survey, 954;—reserves, 810; Nyasaland, 1089; tuberculosis rates correspond, 1139; Union reserves, 806.

Population (*cont.*)

detribalism, effect on, 699.

E. Africa map compiled, 115.

enumeration methods, 109–24.

errors in estimates of, 107.

estimates of, 104–9, 1638–9.

European: effect of climate on, scientific study required, 1666; permanent, S. Rhodesia, 1379–80; statistics of, *table*, 109.

French dependencies: classification, 107; estimates, 122.

French Equatorial Africa: 105–6; decline, 106.

Gold Coast increase, 119.

High Commission Territories, census, 110.

increase, effect on productivity of land, 1063.

Kenya: 105; Indians, 335; records, 115; trends, 116.

Kuczynski, Dr. R. R., studies of, 107.

labour migration, effect on, 128–9, 699, 703, 705.

land tenure affected by pressure of, 830.

Natal records, 110.

non-native: classification, 117; Kenya census, 117; Tanganyika census, 117; Uganda census, 117.

Northern Nigeria, 105.

N. Rhodesia, 112.

Nyasaland, 112–13, 1385.

Orange Free State records, 110.

polygamy and, 128.

records: inadequacy, difficulty for health organization, 1204–5; summary and conclusions, 1638–9.

registration methods, 109–24.

Ruanda-Urundi, estimates of, 122.

Senegal, redistribution, 1052.

Stanley and estimates of, 104.

statistics of: *table*, 108; Tanganyika, 113–15;—Indian community, 341.

taxation, influence on, 594.

Togo, Fr. Mand., enumeration methods, 123.

Transvaal records, 110.

trypanosomiasis, influence on movement and transfers of, 1131, 1132, 1133.

Uganda, Asiatic community, 342.

Union of S. Africa: Asiatic, 325–6; census, 110; classification, 107;

Population—Union of S. Africa (*cont.*)
 'coloured' increase, 109; European increase, 109; increase estimates, 106-7; infantile mortality estimates, 111; Statistical Council and registration, 112.
 water supply and, 113, 1044.
 W. Africa, urban density, 26.
 white, definition, 107.
 Portage, *see under* Labour, native.
PORTUGAL: Berlin Act signatory, 1341; Colonial Charter (1933), Portuguese Catholic missions, position under, 1278; colonial policy—mining rights, grants, 1528;—political and social objectives, summary and conclusions, 1641; colonial service—medical training, 1181;—training school, 245; Free Trade provisions, Congo Treaties, reservations, 1342; Higher Colonial School at Lisbon, colonial service training at, 245; imports, total, proportion from African territories, 1333; labour—conventions with Union of S. Africa, 652-3;—recruitment for Union of S. Africa authorized, 638; Lisbon, plague introduction to Angola through, 1135; missionaries, Roman Catholic Portuguese, special position, 1278; railway convention with Transvaal, 1567; St. Germain Treaty, reservation, 1342; School of Tropical Medicine, 1181.
 Portuguese: crops introduced by, to Africa, 883-4; explorations, 1309; minerals, influence on expeditions, 1485.
Portuguese Colonies.
 agriculture: compulsory production, 635; credit fund established, 1481.
 aviation, *see under* Portuguese Colonies, transport.
 Bantu inhabitants of, 22.
 broadcasting, 1300.
 capital: foreign investment, 1318;—amount per head, 1319; public listed, amount, 1319-20.
 civil service: 245-6; method of appointment, 246; salaries, 246; training, 245.
 companies, exploitation by, 1313.
 Economic conference, five-yearly, 214-15.
 education, native: character and policy, 1283; language policy, 96.

Portuguese Colonies (*cont.*)
 erosion, 1106.
 government: 213-16; advisory bodies at Lisbon, 215; advisory councils, 215; Colonial Charter, provisions, 213-16; Colonial Minister's powers, 213, 214; Council of the Colonial Empire, its powers, 213; councils in, 215; Governor's Conference at Lisbon, its duties, 214; local councils, classes and functions, 215; local juntas, composition, 216; municipal councils, composition, 215-16; National Assembly in Portugal, powers over, 213, 214; political and social objectives, summary and conclusions, 1641; provincial juntas, composition and powers, 215; reports not published, 216; Superior Colonial Council, historical development, 214.
 half-castes, status in, 215.
 health and medicine, Capuchin pioneer work, 1115.
 import and exchange restrictions, 1345-6.
 import duties, customs tariff, basis, 1345-6.
 imports from Portugal, proportion, 1335.
 industrial concerns, concessions to, 797-8.
LABOUR: compulsory—agricultural, 635;—regulations, 623-4;—vagrants and destitute liable to, 623; insurance provisions, 682; migration, 700, 703; 'native card' system, 671; Native Labour Code (1928), 623, 650; *prestação*, system and definition, 623; private employment, recruitment rules, 657; recruitment—abuses alleged, 698;—compulsory element, 638-9;—methods, 650;—official legislation prohibiting, 650;—regulations, 708; wage determination, 682; welfare regulations, 682.
 land: concessions—control, 797-8;—*prazos*, control, 797-8; native—area, 796-7;—reserves, provision, 796; state domain, definition, 796; tenure, native titles, provisions, 863.
 language: 96; policy, 83, 96.
 law: character of, 279; native customary, codification, 279.
 liquor, sale, control regulation, 682.

Portuguese Colonies (*cont.*)

missions, national catholic, special position, 1277-8.

Moçambique Company: exports, 1322; land holdings granted to natives, 863; powers, 216, 1313; railway concession acquired by British South Africa Company, 1572.

Mossamédès Company, powers, 1313. native administration, chiefs and labour recruitment, 650.

press, vernacular publications, 1295-6. S. Rhodesian labour recruited from, 653. taxation, native direct, capitation fees for native welfare, 650.

vagabonds, regulations governing treatment, 623.

ANGOLA:

agriculture: livestock, sheep—breeding importations, 932;—stock farms, 953; native education, 1278.

Belgian Congo exports to, 1332.

Berlin Act includes, 1341.

civil service, divisions, 245.

colonization: assisted, 1596; plan, 797. companies, *Diamang* (*Companhia de Diamantes*), 1515.

Cuanhama stock farm, 953.

education: European—schools, Loanda *lycée*, 1278;—secondary, 1278; native, 1278;—agricultural, 1278;—missionary work, 1278;—schools, 1278.

exports, percentage to Portugal, 1332.

finance: capital investment, railways, 1594; loans for colonization, 1641; revenue, 1456-7.

Ganda stock farm, 953.

government: advisory council, composition and functions, 215.

health and medicine: health services—missionary work, 1182;—state, 1181-2; hospitals, 1181; plague—endemic centre, 1135;—introduction from S. Africa, 1135.

Humpata stock farm, 953.

import duties and exchange restrictions, 1345-6.

imports, copper from Belgian Congo, 1329.

labour: cocoa plantations, recruitment, 651; migration to S. Rhodesia, 1380; *prestation*, regulations governing, 624.

land tenure system of Tonga, 831.

language, 86, 96.

Portuguese Colonies—Angola (*cont.*)

Loanda plague outbreak, 1135.

Lobito Bay, port, cost, 1595.

meteorological service, 15.

minerals, diamonds, 1515.

mines: diamond—area and exploitation, 1515;—marketing, 1515;—production, 1515; rights, *Companhia de Diamantes de Angola*, 1528.

missions: educational work, 1278; medical work, 1182.

plateau of, 7.

Quilengues stock farm, 953.

railways: Benguela—financial position, 1606;—international question, 1594;—private enterprise, 1604-5; Benguela-Katanga line, completion and cost, 1595-6; Benguela Railway Co., 1595; capital expenditure, 1594; goods traffic, 1594; lines and mileage, 1594.

roads, 1565.

Portuguese East Africa, *see* Portuguese Colonies, Moçambique.

GUINEA: meteorological services, 16; plague, minor outbreaks, 1135.

MOÇAMBIQUE:

agriculture: crops, sugar exports, 1328; livestock, stock farms, 953; veterinary research, 953.

Beira, harbour works, 1.

Belgian Congo exports to, 1332.

Berlin Act includes, 1341.

civil service: divisions, 245; training, 1278.

education: European—free, compulsory, 1278;—government service training, 1278;—primary, 1278;—secondary, 1278; native—free, compulsory, 1277;—language policy, 1277;—missionary work 1277-8;—primary, 1277;—schools, 1277;—technical, 1277.

exports: sugar, 1328; to Portugal, 1332.

finance, public: 1456; capital investment, railways, 1596.

government, advisory council, composition and functions, 215.

health and medicine: central commission, medical work, 1181; health services—central commission for public charity, work, 1181;—institutions for, 1181;—organization, 1181; hospitals, 1181; laboratory service, 1181.

Portuguese Colonies—Moçambique (*cont.*)
 import duties, customs tariffs, 1345.
 imports, copper, from Belgian Congo, 1329.
 labour: agreement with S. Rhodesia, 653-4; wages, supervision, 695.
 land, concessions, *prazos*, control, 797-8.
 language, Thonga, 53.
 Lourenço Marques: mining concessions granted, 1528; veterinary laboratory, 953.
 meteorological service, 15.
 minerals: coal, 1508; development and transport, 1602; gold, 1508.
 mines: coal, 1508; gold, 1508; regulations, 1528.
 missions, medical work, 1181.
 railways: coal-field connexion project, 1508; finance, 1596, 1605; lines and mileage, 1596; state and British investment, 1596.
 Rand labour recruited, 652.
 roads: classification and mileage, 1564-5; lines, 1564.
 transport, air, trans-African services, 1599.
 Transvaal—Moçambique Convention, 1569.
 Portuguese West Africa, *see* Portuguese Colonies, Angola.
Practical Suggestions for the Learning of an African Language in the Field, by Dr. Ida Ward, 72.
Prazos, *see* under Portuguese Colonies, land.
 PRESS: Achimota College, 94 (*see also* under Gold Coast, education (native)); native educational use, 1292-3; N. Rhodesia, vernacular articles in government newspaper, 86; Tanganyika—*Mamba Leo*, value of, 51;—Swahili children's magazine, 88;—Swahili newspaper, 88; vernacular—demand for, 69;—publications, 1295-6.
Prestation, labour-tax in French dependencies, 624-6; *see also* under Labour, native and non-native; French Dependencies, labour and taxation; Togo-land, Fr. Mand.
 Price, H. L. Ward: anthropological studies in Yoruba, 47; land tenure customs in Yoruba studied, 839, 854.
 Prince of Wales College, Achimota, *see* under Gold Coast, education (native).
 Pritchard, Dr. E. Evans, studies financed

by Anglo-Egyptian Sudan government, 54.
Prix Concourt, native winner, 1294.
 Production, native, stimulation as remedy for migration, 706.
 Propaganda, health and hygiene, 1198-9.
 Punjab rivers, conservation measures, 1060.

Q

Quarterly Bulletin of the Health Organisation, League of Nations publication, 1153.
 Queen Elizabeth Fund, *see* under Belgian Congo, *Foréami*.

R

RACE RELATIONS:

Boer and British in Union of S. Africa, universities' influence upon, 1211.
 Gen. Botha's views, 145.
 Cape Native Franchise, *see* under Union of S. Africa, Cape Province (franchise).
 civilized labour policy: in Union of S. Africa, 682-9;—railways, 1607; unskilled white labour, minimum standard maintenance, 1369-70.
 colour bar: legislation (1926) Union of S. Africa, missions, position, 1216; no legal in universities, Union of S. Africa, 1211; tendency, labour, S. Rhodesia, 1384; Union of S. Africa, 688-9.
 education, native: no colour distinction, French dependencies, 1262; Union of S. Africa, financial assistance, differential basis, 1213, 1218.
 French dependencies, assimilation and association of natives, 1389.
 Gen. Hertzog's policy, 130-1.
 Indians, *see* Indians.
 Kenya land acquisition restrictions, 747.
 labour: history in Union of S. Africa, 636-8; native, no bar on skilled, Belgian Congo, 1275; policy in S. Rhodesia, 689-91.
 LAW: citizen and non-citizen status in French dependencies, 194-9; differential—Kenya, 384-5;—S. Rhodesia, 269-70, 377, 378;—Union of S. Africa, 267-9, 348, 366-8, 369-71.

Race Relations (*cont.*)

- Natives Representative Council, Union of S. Africa, and, 155.
- non-European immigrants: effect on question of, 316-44; summary and conclusions, 1644-5.
- Pass Laws, effect on, 664-71.
- segregation policy: development in Union of S. Africa, 347-8, 369; land aspects of, 803-5.
- South African Institute of, fellowships for anthropological study, 223.
- S. Rhodesia: land policy, 735-7; native reserves established, 131.
- Union of S. Africa: Gen. Botha's views, 145; British and Dutch views, divergencies, 149; labour policy and colour bar, 131; land allocation, 721-2; population question, 106-7; segregation policy, definition and initiation, 130-1.
- white settlement areas, common policy advocated in Union of S. Africa, 132.
- Races: classification of, 12, 18; fusion in Africa, 18.
- Radcliffe-Brown, Prof. A. R., anthropology, field work methods, 44.
- Railways, *see under* Transport and territories.
- RAINFALL: average, 15; Basutoland, 1084; Cameroon mountain, 12; Congo, 12; E. Africa, 13; evaporation rates, 17; Freetown, 12; Gold Coast records, 15-16; loss of, through erosion, 1060; Nyasaland, Shire highlands, 1089; population distribution and, 1040-1; run-off and, in Union, 1031; Sierra Leone, 1102; sunspots and, 14; Tanganyika, northern, 1091; W. Africa, 12.
- Rattray, Captain R. S.: anthropological inquiry in Gold Coast, 47; indirect rule and African attitude expounded by, 541.
- Red Sea, 3.
- Rehoboth Bastards, *see under* S.W. Africa.
- Reith, Sir J. C. W., broadcasting report, 1296.
- Rejaf Conference on language, 80.
- Religion: Bantu beliefs, 25-6, 29-32, 694; Islam, Arab spread of, 317; land tenure, beliefs associated with, 833-4; livestock, beliefs associated with, 22, 882.
- Remaking of Man in Africa*, by J. H. Oldham and B. D. Gibson, quoted, 1242.

RESEARCH:

- administrative inquiries, subjects undertaken, 1614.
- administrative officers, difficulties, 1614-15.
- African Bureau: organization and functions, 1634; recommended, 1634-5; summary and conclusions, 1662.
- agricultural, *see under* Agriculture, research.
- botanical: subjects for inquiry, 1613; institutions, *see under* Forests; Agriculture; and *under* territories.
- British dependencies, *see under* British dependencies, research.
- climatic effect on Europeans in tropics, 1613.
- collaboration, measure achieved in British areas, 1625.
- Colonial Development Fund, *see under* Great Britain.
- Conferences, 1616-17, 1625-6; *see also under* subjects and territories.
- co-ordination: 1624-7; African Bureau—recommended, 1634-5;—summary and conclusions, 1662; British areas lacking, 1627.
- development: British areas, future considerations, 1628-9; British Empire, 1617.
- dissemination of information, policy in British areas, 1625.
- finance, conclusions, 1662.
- future of, conclusions, 1662.
- health and medicine, *see under* Health and Medicine, and territories.
- inter-departmental administrative co-operation needed, 1612-13.
- interdependence of branches, 1612.
- labour, native, migration, need for inquiry into effect, 1613-14.
- land, native rights, lines of inquiry, 1612-13.
- legal system, need for, 1612.
- linguistic: British areas, 1621; finance, 1621; need for, 1612; *see also under* Language.
- Lovat Committee, 1622.
- native customs, need for, 1613.
- natural history, *see under* Great Britain, British Museum.
- organization, international, 1615-16.
- publications, 1618, 1620, 1633-4.
- social economy, native, need for, 1612.

Research (*cont.*)

- soil fertility, need for, 1613; *see also* under Agriculture, research.
- survey, arc of 30 meridian, completion needed, 1613; *see also* under Survey.
- term defined and subjects included, 1611-13.
- tsetse fly, British organization, 1618; *see also* under Tsetse Fly.
- veterinary, subjects for, 1612-13; *see also* under Agriculture, research.
- water supply, subjects for inquiry, 1613; *see also* under Water Supply.
- Reserves, native, *see* under Land, Native Reserves and territories.
- Reste, M., Governor-General of Fr. Equatorial Africa, administrative reorganization proposed, 240-1.
- Revue anthropologique*, published by *Institut International d'Anthropologie*, 54.
- RHODES, C. J.: aims in S. Rhodesia, 157; diamond policy, 1509; equal rights declaration, 130, 159; Glen Grey Act, (1894), introduced by, 352; labour policy, 638; mining concession in S. Rhodesia, 732; native education criticized, 1218; railway construction, 1567; railway project, trans-African plan, 1572.
- Rhodes Livingstone Memorial Institute, government anthropologist at, 54.
- Rhodes Scholarships, S. Rhodesian portion of, 1225.
- Rhodes Trust, research grants, 1620.
- Rhodesian Export and Cold Storage Company, beef trade development, 938.
- Rhodesian Native Labour Bureau, recruitment by, 653-4.
- Rhodesian Ndebele language, 82
- RHODESIAS, THE: Bantu inhabitants of, 22; capital — investment, 1318; — public listed, 1319; railway system, *see* under S. Rhodesia, railways; Rand labour recruited from, 652; trade with non-British territories in Congo zone, 1343; tsetse-fly distribution, 1129.
- Rift valley system, 135.
- Rivers, navigable, 1540.
- Rivers, W. H. R., anthropological survey work, 421.
- Roads, *see* under Transport and territories.
- ROCKEFELLER FOUNDATION: grants—anthropological work, 51-3;—Medical Research Institute, Nigeria, 1127;—

- School of Oriental Studies, London, 73; International Health Division—research finance, 1621;—work, 1153, 1616;—yellow fever research, 1127; yellow fever investigation, Liberia, Uganda, and Nigeria, 1127.
- Roman Empire, law, evolution of, contrasted with British India, 261-3.
- Rome Agreement (1907), 1616.
- Ronga language, 83.
- Roscoe, Dr. J., anthropological survey work, 44.
- Ross, Dr. G. A. Park, malaria control measures, 1126.
- Ross, Dr. G. R., blackwater fever studied, 1127;
- Ross Institute of Tropical Hygiene: incorporated with London School of Hygiene and Tropical Medicine, 1125; Tanganyika plantation labour conditions examined, 677.
- Ross, Mrs. Leith, work on Fulani, 92-3.
- Rothamsted Experimental Station, *see* under Great Britain.
- Rowett Research Institute, *see* under Great Britain; Universities, Aberdeen.
- Royal African Company, charter, terms, 1312-13.
- Royal African Society, publications, 51.
- Royal Anthropological Institute: presidential address (1935) quoted, 74; publications, 51.
- Royal Botanic Gardens, Kew, *see* under Great Britain.
- Royal Niger Company: 1313; administration in Nigeria, 133; charter granted, 1397; formation, 1396-7; land rights acquired, 769; lands in N. Nigeria acquired by government, 771-2; mining licences granted by, 1501; mining royalties agreement, 1520; tin prospecting, 1500-1; trading dominance retained, 1397-8; treaties with emirs in N. Nigeria, 771.
- Ruanda language, commercial use, 96.
- Ruanda people, political organization in Lacustrine kingdoms, 23-24.
- Ruanda-Urundi, Belgian Mandate.**
 - administration, territorial divisions, 243.
 - agriculture: compulsory production, 633-4; crops—cassava, native cultivation, 896;—coffee, native cultiva-

Ruanda-Urundi, Belgian Mandate—
 agriculture (*cont.*)
 tion, 911;—cotton, native cultivation,
 906;—maize, native cultivation, 893;
 —millets, native cultivation, 894;
 official publications, 958.
 Astrida: medical school at, native
 training, 1192; 'official' school, edu-
 cation at, 1276.
 civil service: native, provision for, 244;
 number of personnel, 244.
 education, native: 1275-6; chiefs,
 Astrida school, 1276; chiefs under
 denominational control, comment,
 Permanent Mandates Commission,
 1277; inspectorate system, 1276;
 medical subordinate staff, 1192;
 missions—interdenominational com-
 petition, 1275-6;—'national', subsi-
 dies restricted to, 1275-6;—Roman
 Catholic predominance, 1275; mis-
 sion schools—Protestant, numbers
 and attendance, 1276;—Roman
 Catholic, numbers and attendance,
 1276; Moslems, schools, 1276.
 erosion: 1106; control tax, on surplus
 stock, 1071.
 exports: to Germany, 1339; percentage
 to Belgium, 1332.
 finance, public: expenditure, statistics,
 1456; native tax revenue, 1459.
 government of, 212-13.
 health and medicine: health services—
 expenditure, 1181;—native subor-
 dinate staff, training, 1192; hospitals,
 number and patients, 1181.
 imports from Germany, proportion,
 1338-9.
 infant mortality statistics in, 122.
 judicial system (*see also under* Belgian
 Congo): native courts, 294; *Tribu-
 naux de chefferie*, functions, 294; *Tribu-
 naux régionaux*, functions, 294.
 labour: compulsory, regulations, 621;
 employees, numbers, 607; labour
 offices, 680; recruitment by *Union
 Minière* sanctioned, 645.
 Lacustrine kingdoms in, 23-4.
 land: alienation—control, 795-6;—
 native to non-native, regulations and
 procedure, 825; German policy, 795;
 mineral—rights, 1520;—prospecting
 regulations, 1522; National Parks re-
 served, 796; sale by natives, control,
 795-6.

Ruanda-Urundi, Belgian Mandate (*cont.*)
 libraries, 1293.
 Mandate, terms, missionary rights,
 1275.
 minerals: prospecting, native lands,
 1522; rights, ownership, 1520.
 missions: interdenominational com-
 petition for school sites, 1275-6;
 Roman Catholic, control of Astrida
 school, 1276.
 national parks, 796.
 native administration: chiefs—dis-
 missals of, 535;—education, 1276;
 German system, 435, 495; native
 authorities—appointment, 495;—
 revenue, 495.
 Nyanza school, 1276.
 population estimates in, 122.
 roads, mileage and classification, 1564.
 Sultans of Ruanda and Urundi,
 powers, 494-5.
 taxation, native direct: revenue from,
 1459; surplus stock, 1071.
 Rudd Concessions, mineral rights in S.
 Rhodesia, 732.
 Rundi language, commercial use, 96.
 Russell, Sir J., research and exploitation,
 quoted, 1628.
 Russia, Berlin Act signatory, 1341.
 Ryckmans, P., Governor-General of
 Belgian Congo: Belgian Congo debt
 charges analysed, 1454; calls language
 conference, 96; educational policy,
 1275; opinions of knowledge on Congo
 population, 121; recommendations on
 Governor-General's powers in Congo,
 210-11.

S

Sadami, *see under* Belgian Congo, health
 and medicine.
 Sahara desert: encroachment, 14, 1103-
 4; progressive desiccation, 14; railway
 project, 1588-9; sand carried by wind,
 1059; sand penetration from into N.
 Nigeria, 999; water supply diminish-
 ing, 1104.
 St. Germain, Treaty: commercial pro-
 visions of, 1342; missionary rights—
 guaranteed, French participation,
 1261;—Ruanda-Urundi, 1275; ratifi-
 cation decree, Fr. Equatorial Africa,
 1268; religious liberty guaranteed,
 Belgian Congo, 1270.

- St. Vincent, Empire Cotton Growing Corporation research station, 951.
- Salazar, Dr.: railway development policy, Angola, 1595-6; reconstruction of colonial government, 1641.
- Salkin, P., description of African religious beliefs, 30.
- Salvation Army: assists ex-convicts in Kenya, 314; home for juvenile offenders in Gold Coast, 313.
- Sami, *see under* Belgian Congo, health and medicine.
- Sampson, H. C., Tana river irrigation plan investigated, 1041-2.
- Sango language, 95.
- Sapir, Prof.: author of *The Gweabo language of Liberia*, 73; professor of anthropology and linguistics at Yale, 101.
- Sarbah, J. M., land tenure, native custom, judicial decisions on in Gold Coast, 840.
- Sarraut, A. (French Minister of Colonies): Cameroons railway, strategic object of Germans alleged, 1590; colonial development policy of, 139-40; development measures associated with, 1125; native policy developed by, 139.
- de Sassure, linguistic scholar, 102.
- Sastri, Rt. Hon. V. S. S.: Agent of Indian Government in S. Africa, 331; founder of Sastri College, Durban, 331.
- Sastri College: Indian college at Durban, 331; Indian subscriptions for erection, 333.
- Sauer, J. W., minister of Native Affairs, Cape Province, native policy in Transkei, 351.
- Savannah, vegetation, 12; *see also under* Forests.
- Sawyer, Dr. W. A., preventive inoculation, yellow fever, 1128.
- Saza chiefs, Buganda, 445-6.
- Schapera, Prof. I., studies in Bechuanaland, 54.
- Schapera, Prof. I., and Lestrade, Prof. G. P., Bechuanaland native land tenure, study on, 838.
- Schebesta, Dr. P., linguistic research, 77.
- Schilling, Dr. C., trypanosomiasis (animal), immunization work, 932.
- Schmidt, Pater W., work on orthography, 78.
- School books, vernacular, Uganda, 88; *see also under* Education; Language.
- School of Oriental Studies, African Department: languages studied at, 72; linguistics, lectureship, 102.
- Schwarz, Prof., Kalahari lake restoration theory, 1035-6.
- Sea Island cotton, breeding experiments by Empire Cotton Growing Corporation, 950.
- Séchehayé, Prof. of *Grammaire Théorique* at Geneva University, 102.
- Selborne, Viscount, and native franchise, 151.
- Self-government, demand for, in Br. E. Africa, 135; *see also under* Great Britain, colonial policy; British East Africa.
- Seligman, Professor and Mrs. C. G., studies financed by Anglo-Egyptian Sudan government, 54.
- Semitic language, 74.
- Semliki river, transport link, 1543.
- Senegal river, transport system, 1545.
- Senegalese troops, French, tuberculosis susceptibility, 1138.
- Serowe, capital of Mangwate, size of, 23.
- Service Auxilaire de l'Assistance Médicale aux Indigènes*, *see under* Belgian Congo, health and medicine (*Sadami*).
- Service de l'Assistance Médicale aux Indigènes*, *see under* Belgian Congo, health and medicine (*Sami*).
- Shakespeare, translation into Tswana, 83.
- Shambala language, 88.
- Shari river, system, 3.
- Shehu, position of, in Cameroons Br. Mand., 434.
- Shepstone, Sir T.: advocates chiefs' council in Transkei, 351; appointed Diplomatic Agent to Natal tribes, 345; Natal land policy, 719; native policy in Natal, 357; provision of 'exemption' system in Natal, 358; system developed by, in Natal, ends, 358.
- Shifting cultivation, *see under* Agriculture, native.
- Shilluk language, 77.
- Shire Highlands and river, *see under* Nyasaland.
- Shona language group, 85.
- Sierra Leone.**
- AGRICULTURE:
- co-operative marketing, 1477.
- crop deterioration from erosion, 1102.
- crops: beeswax, native cultivation,

Sierra Leone—Agriculture (*cont.*)

890; coffee, native cultivation, 910; ginger—exports, 1399; native cultivation, 890; kola nuts—export duty, 1445;—exports, 1399;—native production, 890; palm-oil industry, development by concessionaires, 781-2; palm products—export duty, 1445;—exports, 1327, 1399;—native production, 913;—oil mills, 1399; piassava—exports, 1399;—native production of fibre and bark, 889; rice—co-operative organization, 1476-7;—cultivation encouraged, 1102;—disease caused by unwholesome, 1123;—native cultivation, 894; sesame, native cultivation, 900.

Department, anti-erosion policy, 1102, education: native training facilities, 968; schools, Mbang Academy (training course), 968, 1247.

European, palm plantation, 919.

exchange visits, 957.

expenditure, 1445.

livestock, hides and skins, 940.

research: 951; green manuring, 1102.

stations, Njala, 968.

Aviation, *see under* Sierra Leone, Transport; Transport and Communications, air.

Broadcasting, 1299.

Capital, public listed, 1319.

Census in, 119-20.

Chamber of Commerce, representation on legislative council, 173.

Civil service: African employment in, 235; pensions cost, 1445.

Climate, 12.

Colony: historical antecedents, 480; representation on legislative council, 173.

Concessions, Ordinance permitting, 1399.

Co-operation, native, 1476-7.

Development Company, private railway, 1587.

Economic development, 1398-9.

Education, native: advisory committee, composition, 1238; agricultural training, 968; chiefs' sons, 1257; expenditure on, 1445; Fourah Bay College, 1248;—finance, 1250;—teacher training, 1251;—university course, 1250; higher, 1250; medical subordinate staff, 1191; schools—agri-

Sierra Leone—Education, native (*cont.*)
cultural, Mbang, 1247;—chiefs' sons, Bo, 1257;—Sir Alfred Jones Technical, 1247; secondary, 1242; teachers, training facilities, 1251; vocational, 1247.

Erosion, extent of, 1101-2.

Export duties: 1445; palm kernels, 913.

Exports: beeswax, 891; coffee, native grown, 910; decline in value, 1328; ginger, 1399; hides and skins, 940; kola nuts, 890, 1399; minerals, 1399; palm oil and kernels, 913, 1327, 1399; percentage, Great Britain, 1330; piassava, 1399;—bark, 889; sesame, 900.

Finance, public: budgetary position, 1445; debt, 1445;—charges, 1352; expenditure, 1445;—debt charges, 1352;—pensions, 1352;—roads, 1561; social services, 1434; railways, 1587; revenue, 1445.

Forests: area, 1003; deforestation, 1003, 1101-2; demarcation, 1102; forestry staff, 1004; investigation, 1011; nursery, 1004; reafforestation, 1004; reserves, area and demarcation method, 1003-4.

Franchise qualification, 173.

Freetown: municipality constituted, 519; rainfall in, 12; Sir Alfred Jones Laboratory, plague research, 1136; town council, composition and competence, 522; tribal headmen, appointment and duties, 522; vital statistics registration in, 120; yellow fever and water supply, 1128.

Government: legislative council, composition and powers, 173; municipal government, 519; financial administration, expenditure on, 1445.

Health and Medicine:

disease: leprosy incidence, 1142; unwholesome rice and, 1123; yellow fever—endemic area, 1127-8;—reduction in Freetown, 1128.

health services: expenditure, 1170, 1445; native subordinate staff, training, 1192; organization and staff, 1170.

hospitals: accommodation and patients, 1170; Colonial Development Fund grant, 1191; Connaught, native training at, 1191.

Sierra Leone—Health and Medicine (*cont.*)
 maternity and infant welfare, 1191.
 missionary work, 1117.
 research: institutions, 1161; Sir Alfred Jones Laboratory, work, 1160, 1623.
 surveys, leprosy, 1142.
 Imports: customs duties, 1445;—basis, 1335; government, 1340; proportion—of British African, 1335;—of different, 1335; rice, 894; value per head of population, 1334.
 Judicial system, native courts, civil and criminal jurisdiction, 181.
 Kroo natives, exemption from headmen's control in Freetown, 522.
 Labour, native: communal labour, regulations governing chiefs' use of, 610; compulsory labour, regulations, 620; employees, numbers, 607.
 Land: alienation to non-natives by private purchase, control, 827; concessions, control, 780–2, 1399; Crown, forest reserves in colony, 1003; laws, term 'native' defined, 829; native, mineral prospecting, 1522; occupation, control, 782; ownership, native system recognized, 780; tenure, native customary law on, study of, 840.
 Languages in, 95.
 Mendi rising, 1399.
 Minerals: diamonds, 1503, 1514; exploitation monopoly, Consolidated African Selection Trust, 1527; gold, 1503; haematite, 1503; iron ore, 1503; platinum, 1503; prospecting, native lands, regulations, 1522.
 Mines: diamond—Consolidated African Selection Trust, 1514;—production, 1514; gold production, 1503; iron, railway line for, 1587; native employees, 607; regulation, 1527; taxation—gold royalty, 1531;—profits, 1531.
 Missions: Church Missionary Society—educational work, 1251; medical work, 1117.
 Native Administration: 480–2; chiefs'—right to tribute, 588;—status and powers, legislation defining, 480–1; development, similarities with Gold Coast, 480; Freetown—council, 522;—tribal headmen, appointment and duties, 522; native courts, *see under* Sierra Leone, judicial system; reorganization of systems in progress,

Sierra Leone—Native Administration (*cont.*)
 481; road maintenance, 1560; tribal assembly, infrequency of, 481.
 Njala: agricultural station, green manures, 1102; agricultural laboratories, 951.
 Northern areas, erosion, extent, 1102.
 Orthography adopted, 80.
 Public Works, expenditure, 1445.
 Railways: carriage, influence on palm kernels production, 1587; construction and cost, 1399, 1587; Development Company's line, 1587; finance, 1445, 1587, 1606; lines and mileage, 1587; motor competition, restriction, 1561.
 Roads: classification, 1560; competition with railway, restriction, 1561; maintenance cost, 1561; mileage, 1560; motor, Colonial Development Fund grant, 1560.
 Scarces, floodland rice tests at, 951.
 Social organization of colony and protectorate, 480.
 Subsidies, palm kernels, 1587.
 Taxation:
 mining: gold royalty, 1531; profits, 1531.
 native direct: chiefs' powers to levy tribute, 588; house property, rate on value in Freetown and Sherbro district, 587; house tax—collection, 588;—history of, 587–8;—rate, 588;—yield, 1445; revenue from, 1458; systems, 587.
 non-native direct: poll tax, 550;—rates, 552;—yield, 1445.
 profits, 1445.
 Trade, balance, 1352.
 Transport: air, local, Elders Colonial, Lagos—Freetown, 1660; river system, 1543.
 Vernacular literature, 95.
 Vital Statistics, registration in, 120.
 Visit of Dr. Westermann, 80.
 Sikalu, Barotseland council, 457; *see also under* Northern Rhodesia, Barotseland.
 Sikes, H. C., Kenya underground water resources, report, 1042.
 'Simplified English', research into, 1294–5.
 Singapore, Epidemic Intelligence Bureau, 1154.
 SLAVERY AND SLAVE TRADE: abolition—

Slavery and Slave Trade (*cont.*)

- Berlin Act and, 1341;—Boers and, 130;
—British colonial policy and, 132-3;
Arab expansion of, 317; control in
Nyasaland, 1385; diseases spread by,
1143-4; influence of—on conditions of
employment, Union of S. Africa, 636-
7;—on early economic development,
1309;—on labour, 636; Kenya-Uganda
railway line and, 1582; labour supply
affected by, 603; Slavery Convention
(1926), compulsory labour defined, 628;
Temporary Slavery Commission of
League of Nations on labour recruit-
ment, 648; transport and communica-
tions developed by suppression cam-
paign, 1538; W. African penetration
for, 1396.
- Sleeping sickness, *see under* Health and
Medicine, trypanosomiasis, *and under*
territories, health and medicine.
- Smec, Captain, visit to Zanzibar, 318.
- de Smidt, Dr. E. P. G., anti-plague
inoculation research, Kenya, 1136.
- Smith, Dr. E. W.: Bantu studies, 76; his
linguistic work, 72; opinions quoted,
74, 100; presidential address to Royal
Anthropological Institute, 42; *The
Golden Stool* and anthropological in-
quiry, 35.
- Smith, Sir H.: denounces 'treaty' policy
in Br. Kaffraria, 348; and Kaffir mar-
riage contracts, 41.
- Smuts, General the Rt. Hon. J. C.:
councils in Transkei and Ciskei de-
scribed, 531; negotiates with Ghandi
on Indian question, 323; opens
Natives Representative Council (1937),
154; opinion on defence, 147; opinion
on 'statutory' native offenders, 282;
reserves policy statement, 807.
- Sobat, course of, 3.
- Sobo language, literature in, 91.
- Social customs, African: research into
needed, 1613; spread of tuberculosis
checked by, 1139.
- Social economy: cattle, place in, 882-3;
European influence on, 979, 1359-60;
inquiry into indicated, 1613; native
cultivation systems and, 880-2; pas-
toral tribes, 929.
- Société d'Anthropologie de Bruxelles*, pub-
lications, 55.
- Société d'Anthropologie de Paris*, publications,
54.

- Société d'Ethnographie*, publications, 54.
- Société de Linguistique*, *see under* Language,
institutions, studies, &c.
- Sociétés de Prévoyance*, Fr. W. Africa, in-
fluence on agricultural production, 633.
- Société des Africanistes*, objects and publica-
tions, 55.
- Sohier, M., opinion on functions of
native courts, 304.
- Soil, *see under* Agriculture, research and
soil, *and under* Erosion.
- Soko language, 91.
- Solf, Dr., indirect rule policy in Ger.
Cameroons, 435.
- Somali, position under Kenya land
ordinances, 828-9.
- Somaliland, British, native agriculture,
rotational grazing, 1067.
- Somaliland, French, exports to France,
1331.
- Songhai people, political organization as
large states, 27.
- Sotho: language group, 82-3; Northern
—language, 81;—orthography, 81;
publications, bibliography by Southern
Sotho Committee, 84; Southern—
Committee, 84;—language, 81, 82-3.
- Sotho-Ndebele, mixed dialect in Trans-
vaal, 82.
- South Africa Act, *see under* Union of
S. Africa, constitution.
- South Africa, plateau of: 4; rainfall, 13.
- South African associations, councils, insti-
tutes, &c., *see under* Union of S. Africa.
- South African Protectorates, *see* High
Commission Territories.
- South America: yellow fever in, 1127;
and preventative inoculation, 1128-9.
- South-West Africa, Union of S.
Africa Mand.
- AGRICULTURE: European, extent of,
918; livestock—cattle, meat indus-
try, 938;—dairying, development
projects, 942;—sheep, breeds im-
ported, 931;—wool, 941; Native
Trust Funds and development expen-
diture, 728.
- aviation, *see under* S.W. Africa, transport.
- Constitution: 156; C class mandate,
217; commission appointed, 178;
demand for fuller powers, 177; in-
corporation with Union—demand
for, 177-8;—question of, 173; re-
served subjects, 156.

South-West Africa, Union of S. Africa
Mand. (*cont.*)
education: expenditure, 1435; native—
government grants, forms, 1216;—
schools and scholars, numbers, 1216;
—teachers, training provision, 1216.
export duties, diamonds, 1531.
exports: butter, 942; copper, 1331,
1491; destination, 1329, 1330-1;
diamonds, 1331; hides and skins,
939; meat, 938; pelts, 931; percent-
age to Germany, Great Britain, and
Union of S. Africa, 1331; tin, 1491;
vanadium, 1491; wool, 941.
finance, public: capital investment,
1318; debt, 1435-6; deficits under
Germans, 1435; expenditure, main
heads, 1435-6; German administra-
tion, 1435; revenue, 1435-6; system
under mandate, 1435-6.
German nationalist propaganda in:
177; National-Socialist organiza-
tion suppressed, 177-8.
Germans in, 155.
government: administrative system in,
177; Advisory Council, composition
and functions, 156; Governor-
General's powers, 156; Legislative
Assembly—composition, 156;—
powers, 156.
health and medicine: health service,
organization and expenditure, 1156;
hospitals, numbers and patients,
1156.
Herero and Namaqua rebellions, 726.
Hottentots in, 19.
imports: from Great Britain, propor-
tion, 1335; value per head of
population, 1334.
judicial system: 177, 374; High Court,
appeals to, 374; Native Commis-
sioner's Court, 374, 375;—appeals
from, 374.
labour: disablement compensation,
674; inspection system, 674; native
Pass Laws, 668-9; private employ-
ment recruitment, agencies for, 653.
land: alienation—area of white
settlement, 726;—Crown land area
available, 726; Crown, definition
of, 727; native—acquisition, 728;—
area owned, 728;—expropriation by
Germans, 726;—purchase by Ger-
man government, 725;—rights, Ger-
man recognition, 725; reserves—

South-West Africa, Union of S. Africa
Mand.—land (*cont.*)
alienation, 727-8;—area reserved
for, 728;—demarcation and admini-
stration, 727-8;—German policy,
726;—Native Trust Funds, revenue
and expenditure, 727-8;—number
and area, 728; state control under
Germans, 725; survey (1921), 727;
Union government policy, 727.
language, 83.
law, native customary, recognition, 374.
legislation: differential, 373-4; system,
374.
liquor, native, control in urban areas,
510.
minerals: diamonds, 1513;—export
duty, 1531; tin, 1491; vanadium,
production, 1491.
mines: copper, production, 1491; dia-
mond—Consolidator diggings, 1513;
—control and organization, 1513;
—development before War, 1513;—
Namaqualand discovery, 1513;—
production, 1513; gold, production,
1491; taxation—gold royalty, 1531;
—profits, 1531;—royalty system,
1531.
missions: medical work, 1156.
NATIVE ADMINISTRATION: Advisory
Boards for urban areas, composition,
510; Bastards, system in territory,
376; Chief Native Commissioner
in control of, 376; chiefs' func-
tions, 374; differential legislation,
373-4; expenditure, 1435; judicial
system, 374; legislative system, 374;
magistrates as native commissioners,
376; Native Commissioner's Court,
374, 375; native commissioners in
districts, 376; Native Trust Funds,
revenue and expenditure, 727-8;
Ovamboland system, 375; policy in-
fluenced by Union of S. Africa, 373-
4; 'representative meetings', powers,
375; Reserve Trust Fund, its ad-
ministration, 375; tribal disorgani-
zation, 373; urban areas, control of
native locations, 510.
naturalization: law, 156; Union
Naturalization Act extended to
territory (1926), 156.
meteorological service in, 15.
Ovamboland, administration of, 373,
374-5.

South-West Africa, Union of S. Africa
 Mand. (*cont.*)
 plateau of, 4.
 Police Zone, 726.
 population, European, 155.
 railways, incorporation in Union system, 1570.
 Rehoboth Bastards: administration by mandatory, 375-6; German administration, 375; origin of, 375; treaty with German S.W. African government, 725-6.
 roads: Board, 1551; finance, 1551; routes, 1551.
 taxation: mining—gold royalty and profits, 1531;—royalty system, 1531; native direct—allocation of revenue, 558;—dog tax, 558;—grazing fees, 558;—S.W. Africa Commission's recommendations, 558; non-native direct, special gold mining not introduced, 548.
 transport: air, local services, 1599.
 vital statistics in, 112.
 water supply: boreholes, 1035;—depth, 1033; dams, river scheme abandoned, 1035; deficiency, 1035; development required, 1035; rivers, 1034; wells, 1035.
 white settlement: German area, 726; Union policy, 726-7.

Southern Rhodesia.

AGRICULTURE:

Committee on economic position, findings, 1395-6.
 Cotton Research and Industry Board, functions, 922.
 crops: cotton—European production, 922;—native cultivation, 903;—and Cotton Research and Industry Board, 922; maize—cultural methods, 921;—native cultivation, 892; tobacco, European production, 925; wheat, European production, 921.
 education: native training facilities, 966; schools, Domboshawa, 966.
 European: Committee of Inquiry, report on, 820, 1382; co-operation, 1469; cotton, 922; debt charges, relief measures, 1382-3; economic assistance for, 1382-3; extent of, 919; maize, 919, 920-1; numbers engaged, 1383; policy of supporting, 1383-4; production, rise in, 1383; proportion

Southern Rhodesia—Agriculture (*cont.*)
 of population engaged in, 819, 1380; Rhodesia Land Bank, loans from, 819; State Land Bank, finances of, 819-20; tobacco, 925; wheat, 921.
 gold bearing districts best suited for, 1492.
 livestock: cattle—British breeds introduced for breeding, 931;—meat industry, 938;—quarantine regulations, 936; dairying, 942; dipping, compulsory system, 974; East Coast fever, epidemic, 1079; hides and skins, 940; irrigation for stock-raising, 1039; overstocking, 1086; pigs, experimental export of frozen pork, 939; wool, European production, 941.
 marketing, dairy produce, 1382.
 native: crops, cash, encouragement, 1418; demonstrators for improvement, 1227; department, branch of Native Affairs Dept., 382; improvement, 1418; labour migration's effect on, 704; livestock, overstocking problem, 1418.
 official publication, 958.
 organization: Cattle Levy and Beef Export Bounty Act, provisions, 1382; cotton, 922; maize, 920;—control board, prices policy, 1382; Tobacco Marketing Act, 1382; wheat, 921.
 pests, cotton, 922.
 research, Empire Cotton Growing Corporation, 945.
 Aviation, *see under* Southern Rhodesia, transport (air).
 Banks, Land, 1469.
 British South Africa Company: economic advantages from development by, 1379; native rights under, 376-7; *see also* British South Africa Company.
 Bulawayo: native locations, 511; proportion of European population resident, 1380; technical school at, 1224.
 Census in, 112.
 Civil service: conditions of service, 223; divisions, 223; graduates from Union of S. Africa universities employed, 1210-11; inquiry into, 223; legislative provisions regarding, 222; method of appointment, 223; provisions for further study, 223; recommendations for reorganization, 223-4.

Southern Rhodesia (*cont.*)

Climate, 1379-80.

Constitution: 157-8; amalgamation with Union—question examined, 178-9;—rejected in referendum, 179; amendments to, concerning native affairs, 382; annexation to Crown, 157; dominion status discussed (1934), 158; federation with Union question, 149; franchise, *see under* S. Rhodesia, franchise; grant of (1924), 157; grant of new (1937), 158-9; High Commissioner for S. Africa, *see under* S. Rhodesia, High Commissioner; incorporation in Union considered, 157; Legislative Assembly, self-government resolution passed, 158; legislature, composition, 157-8; political and social objectives under, summary and conclusions, 1640; position of natives under, prominent issue, 376-7; reserved subjects, 157-8; Second Chamber, provision for, 159; union with N. Rhodesia—conference on terms, 181;—Prime Minister protests against closer inclusion of N. Rhodesia in E. Africa, 180;—question examined, 179-81;—Royal Commission of inquiry appointed, 181.

Co-operation: organizations, European, 1469; maize, 920-1; native, non-existent, 1471.

Currency, native requirements, 1419.

Customs and excise revenue, 1459; *see also under* Southern Rhodesia, import duties, and finance, public.

Defence, expenditure, 1436.

Economic system: capital investment, railway system, 1573; European, 1379-85;—process of unification with native, 1384-5;—summary and conclusions, 1658;—white agricultural population, policy, cost of implementing, 1383-4; native—segregation policy affecting, 1417-18;—standard of living, improvement attempts, 1418-19;—subsistence economy, 1419;—summary and conclusions, 1659;—trade development, 1419.

EDUCATION:

coloured children: expenditure by government, 1226; pupils, numbers, 1226; schools provided, 1226.

European: administrative control, change in system, 1225; Beit endow-

Southern Rhodesia—Education (*cont.*)

ments for, 1224-5; boarders, hostel provision, 1224; cost, compared with native, 1226; expenditure, 1224, 1436; 'farm' schools, numbers and maintenance, 1224; fellowships available, 1225; finance—grants to missions, 1224;—state expenditure, 1224; investigation and recommendations, 1225; mission schools, 1224; primary—age-limit, 1225;—free and compulsory, 1224;—state control, 1224; Rhodes Scholarships earmarked for, 1225; scholarship provision, 1224-5; school-leaving age, 1225; secondary—academic, examination taken, 1225;—cost of, to pupils, 1224;—criticisms of, 1226;—modern, term defined, 1226;—schools established, 1224;—South African Joint Board Matriculation Examination, standard, 1225;—types, 1225; technical—Bulawayo School, 1224;—engineering scholarships and fellowships, 1225; Union of S. Africa system followed, 1225.

Minister of, Prime Minister as, 1225.
native: administrative organization,

1227; adult, 1227;—Jeanes system followed, 1228; agricultural—demonstrators, 1227-8;—training, 966; branch of Native Affairs Department, 382; chiefs, 1229; chiefs at Dombashawa, 381; content and purpose, 1226-8; cost, compared with European, 1226; crafts, training in, 1226; Department of Native Education and native languages, 85, 381; demonstrators, training and duties, 1227-8; Director of, 1227; girls, Jeanes School, Hope Fountain, 1228-9; grants to mission schools, 1226; Interterritorial Conference, 86; Jeanes course, 1228; medical subordinate staff, 1188; mission schools, 1226; schools, government—Dombashawa, 1226, 1252;—chiefs' training, 1229;—demonstrators trained at, 1227;—Tjolotjo, 1226; schools, first-class, definition in Ordinance (1903), 1227; teachers' training, 1227.

Empire settlers, farm purchase price reduction, 1382.

Erosion: control measures and expenditure, 1086-7; contour-ridging, 1086-

Southern Rhodesia—Erosion (*cont.*)

7; extent, 1085-6; Soil Erosion Committee, recommendations, 1086.

Exports: agricultural proportion, 1381; bounties, butter, 942; cattle, slaughter, 938; coal, 1494; dairy produce, marketing scheme, 1382; fruit, citrus, value, 1381; gold, 1327;—proportion of total, 1380-1; hides and skins, 940; maize, 920-1, 1382;—value, 1381; meat—bounty system, 1382;—rise, 1383;—value, 1381; minerals—asbestos, 1381;—chrome, 1381;—coal, 1381; percentage, Great Britain, 1330; pork, frozen, 939; tobacco, 925, 1383;—quota system, 1382; value, 1380, 1381; wool, 941.

Finance, public: budgetary situation, 1436; customs and excise revenue, 1459; debt, charges and incidence per head, 1436; expenditure—main heads, 1436;—native development, 1436; loans, 1320, 1438; revenue—mining, 1436, 1461;—native tax, 1458;—non-native direct tax, 1459.

Forests: afforestation—for erosion control, 1086;—policy, 991; area and character, 990-1; conservation for watershed protection, 991; exotic trees, introduction, 1012; reserves, area, 991; service, staff and training, 991; state, area and classification, 991; timber supplies, adequate for mining, 1492; timber trade, 991; vegetation map, 1010.

Franchise: alternative system proposed, 159; native right retained, 377; qualifications, European and native, 159.

Governor of, and labour recruiting, 640.

HEALTH AND MEDICINE:

disease: blackwater fever, 1126; helminthic infestation, incidence, 1147; measles epidemics, 1151; silicosis—incidence, European and native miners, 1148-9;—prevalence, 1150; silicosis and pulmonary tuberculosis inquiry, 1150; trypanosomiasis, game destroyed as control measure, 1131; typhus, tick, prevalence, 1137.

health services: dispensary system in reserves, 1158; expenditure, 1159, 1436; native subordinate staff, training, 1188; organization and staff, 1158-9.

Southern Rhodesia—Health and Medicine (*cont.*)

hospitals: accommodation and patients, 1158-9; lepers, 1142.

missionary work, 1119.

research: blackwater fever, Prof. Thomson's studies, 1126; Bulawayo Bacteriological Institute, 1158; government laboratory, 1158.

subsidies, leprosy work, Mnene Medical Mission, 1142.

High Commissioner for South Africa: duties, 158; position under amended constitution, 159; powers under British South Africa Company, 376-7.

Historical summary, 157.

Housing, native: 511; demonstrators for improvement, 1227.

Import duties: customs—agreement with Union terminated, 1344;—revenue, 1459;—tariff basis, 1344.

Imports: government, 1339-40; proportion—of British African, 1335;—of different, 1334; tobacco from N. Rhodesia, 925; value per head of population, 1334.

Judicial system: appeals to Supreme Court, Union of S. Africa, 269; Court of Appeal, proposal for joint, 285; courts administering native customary law, 380; juvenile offenders, reformatories, 313; native courts—position and powers, 380, 532;—urban areas, 512.

LABOUR:

agreements: with Moçambique, 653-4; with N. Rhodesia and Nyasaland, 654.

'civilized labour policy', 378.

colour-bar tendency, 1384.

European: Industrial Conciliation Act (1934), colour-bar effect of, 1334; provisions, 378, 691; mines, silicosis incidence, 1148-9, 1150; occupations, 1380; organization, 1384; railway employees, wage rates, 1576; unemployed incidence, 1384; wages—policy, 1334;—possible adaptations, 1383;—rates, sheltered industries, 1381-2.

native: compulsory labour, non-existent, 617; contract, duration, 693; curfew rules, 669; disablement compensation, 674; employees, numbers, 606; farm, recruited, 651; Fees

Southern Rhodesia—Labour (*cont.*)

- Ordinance for recruitment, 653;
- migration, 701; mines—measles epidemics, 1151;—migration, tuberculosis spread by, 1149-50;—silicosis incidence, 1148-9; Pass laws, provisions, 378, 669; proportion of population employed by Europeans, 1380; questions, 378; recruitment—areas, 653-4;—by chiefs, position, 649;—committee on (1910-11), 640;—for private employment by officials, question of, 640;—for private employment, organizations, 653-4;—for private employment, *per caput* cost, 655; registration system, 669; shortage for mining, 1492-3; standard of living, 690; unskilled character, 690-1; tax defaulters, 562; wages, rates, 693; welfare regulations, 674-5.
- native and non-native: governmental policy, 689-91; wages, comparative rates, 689-90.
- prison, employment of, 311.
- supplies, internal and external, 653.
- LAND:
- acquisition by non-natives, 158.
- alienation: control, 733;—for European settlement, extent and terms, 818-19;—in native reserves, regulations governing, 824;—powers, 734-5.
- Apportionment Act (1930), purpose of, 378.
- Commission (1925), recommendations, 736.
- concession rights of British South Africa Company, 732-3.
- Crown, definition, 735.
- European: debt charges reduced on, 1382; settlement, post-war scheme, 819.
- grants, provisions under Charter, 732.
- labour tenants, 738.
- mineral rights, ownership, 1519.
- native: allocation, 1417-18; extent reserved for, 818-19; mineral prospecting, regulations, 1521; Native Affairs Department and, 382; policy, 378; provisions, liberality of, 1532; purchase, 735-6; rights—Privy Council's ruling as to, 734;—unallotted land claimed, 733;—under Charter (1889), 732.
- native reserves: administration, 809;

Southern Rhodesia—Land (*cont.*)

- alienation, 734; allocation, 735-6; conditions, 809; control, 737; erosion, 1086-7; European holdings repurchased, 738; expenditure, 379, 809; High Commissioner's control, 734; mineral prospecting regulations, 1521; organization compared with Union of S. Africa, 379; policy initiated, 733; population—density, 809;—transfer to, 737-8.
- native tenure: acquisition by individual title, provision for, 846-7; agricultural improvement, 837; customary position of chiefs exercised by Native Commissioners, 846; customs—development of individual holdings, 1430;—modifications introduced, 846-7; individual title, survey of, 959; Land Apportionment Act (1930), provisions, 846; Native Land Board, functions, 846; new forms introduced, 846-7; special study not available, 838; S. Rhodesia Commission's recommendations, 867-8.
- ownership, Privy Council (Judicial Committee) decision (1918), 733.
- purchase, regulations, 735.
- racial: allocation, 737; areas, 735-6.
- reservation for native occupation, extent, 818-19.
- Royal Charter provisions (1889), 732.
- sovereignty, question of, 732, 734.
- state forest, area, 991.
- title: unallotted, rights over, decision, 733-4; validity of British South Africa Company's, 733.
- unassigned area, 737-8.
- Law:
- appeals to Supreme Court of Union of S. Africa, 269.
- character of, 269-70.
- differential, 270, 378.
- native: criminal and civil, extent of recognition, 379-80; customary—position of, 269-70;—courts administering, 380;—extent of recognition, 379-80.
- source of, 269-70.
- Language: 82, 85; Karanga language group, 85; Research Committee, 85; Shona language group, 85.
- legislation: co-operative societies, 1469; mining, 1493; railways, 1574.

Southern Rhodesia (*cont.*)

Liquor, native, control in urban areas, 511.

Marketing: differential systems, 378; maize, control of, 920-1; *see also under* Southern Rhodesia, agriculture, co-operation.

Mashonaland: early gold prospecting, 1492; language in, 85.

Matabeleland: early gold prospecting 1492; language in, 85.

Meteorological service, 15.

Minerals: base, production, 1494; development and transport, 1604; gold, 1492-4;—exports, 1327;—plant for refractory, 1536; prospecting, native reserves, regulations, 1521; rights—history and policy, 1519;—in native reserves, ownership, 824; total value of products, 1494.

Mines: asbestos production, 1494; Belgian Congo copper export route, 1576; capital investment, 1322; chrome production, 1494; coal production, 1494-5; concessions, 732-3; development, summary and conclusions, 1660; gold, 1492-4;—conditions of working, 1492-3;—production and value, 1493-4;—small properties, production and measures to support, 1493;—under British South Africa Company, 1493; industry, importance in economic system, 1381; labour, native—conditions, 674-5;—measles epidemics, 1151;—silicosis incidence, 1148-9, 1150;—native workings, 1485; proportion European population engaged, 1380; railway construction for, 1575; regulation, 1522; revenue—contribution from, 1436, 1461; taxation, 1531;—gold royalty, 1531;—royalty system, 1530, 1531; total value of products, 1494.

Missions: educational work, 1224, 1226; Jesuits, medical work, 1119.

Mtoko leprosy hospital, 1142.

NATIVE ADMINISTRATION:

Advisory Council on Native Affairs, composition and functions, 382.

Agriculture, branch of Native Affairs Department, 382.

British South Africa Company, 376-7.

Buxton Committee on, conclusions of, 377.

Chief Native Commissioner, functions of, 382.

Southern Rhodesia—Native Administration (*cont.*)

chiefs: on councils, 381; status and functions, 379.

constitution, amendments proposed, 382.

councils: composition and powers, 381; system, development, 380-1.

education: *see under* Southern Rhodesia, education (native).

expenditure on, 1436.

franchise right retained, 377.

general policy in, discussed, 532; *see also under* Southern Rhodesia, race relations.

High Commissioner: 158, 377; powers of, under British South Africa Company, 376-7.

labour: *see under* Southern Rhodesia, labour (native).

land: branch of Native Affairs Department, 382; policy, 378; provisions, liberality, 532; *see also under* Southern Rhodesia, land (native).

law, native: courts administering, 380; customary, extent of recognition, 379-80; position of, 269-70; *see also under* Southern Rhodesia, law (native).

local government, position in, 532.

marketing, separate native system, 378.

Ministry for Native Affairs assumed by Prime Minister, 382.

Native Affairs Department, constitution, 158, 382.

native courts, *see under* Southern Rhodesia, judicial system.

native crafts, development problem, 1418-19.

Native Development Department, creation, functions, 382.

Native Trust Fund, purpose, 379.

officials, training courses in anthropology, 54.

organization of, 382.

pass system, *see under* Southern Rhodesia, labour (native, pass laws).

Registration of Natives Act, 378.

reserves, expenditure on, 379; *see also under* Southern Rhodesia, land (native reserves).

Secretary for Native Affairs, appointment under British South Africa Company, 376.

segregation policy: beginning of, 378; economic aspects, 1417; and reserves, 131.

Southern Rhodesia—Native Administration (*cont.*)

summary and conclusions, 1645.
taxation, separate system, 378.
trade unions, natives excluded from, 378.
urban: areas, entry controlled, 378;
committees, 543-44; natives—control of, 511;—provision of locations, 511;—small proportion, 510-11;—village settlements, 511.

Native peoples initiation ceremonies, 24.
N. Rhodesia, union question, *see under* Southern Rhodesia, constitution.

Plateau of, 4.

Political and social objectives, summary and conclusions, 1640.

Population: density of, 2; enumeration, 112; European—distribution, urban and rural, 1380;—occupations, 1380;—proportion, 1379-80; native increase, 1418.

Press, vernacular publication, 1295.

Race relations: labour, colour bar tendency, 1384; segregation policy, beginning, 378;—economic aspects, 1417;—and reserves, 131.

RAILWAYS: areas served, 1573; Benguela, financial position, 1606; branch lines, mileage and areas served, 1575; British South Africa Company, provision of, 1379; capital expenditure, 1573; companies operating, 1571; development, 1571-2;—route followed, 1572-3; finance, 1573-4, 1605, 1608; financial reconstruction, 1574;—and traffic problems, 1574-6; inquiry, Hammond Reports, 1576; Katanga line acquired (1928), 1573; Kimberley-Bulawayo connected, 1572; Mashonaland Railway Company, operations, 1572-3; N. Rhodesia lines opened, 1573; private enterprise, 1604-5; Railway Trust created, 1574; rates, reduction question, 1574; reorganization, legislative provisions (1926-35), 1574; Rhodesia-Katanga Junction Railway Company, operations, 1573; Rhodesia Railways, operations, 1573; Sinoia-Kafur line question, 1575; survey for development, 1574-5; system, operation in other territories, 1571; Tanganyika Concessions, Ltd., operations, 1573; Walvis Bay line, question, 1574-5; white labour, expense, 1576.

Southern Rhodesia (*cont.*)

Roads: 'all-weather', 1552; Beit Trust assistance, 1552; finance, 1552; mileage, 1552; Public Works Dept., trunk roads control, 1552; Road Councils, local roads, 1552; Roads and Traffic Act, 1552.

Royal Charter (1889), 732.

Rudd mining concession grant, 1492.

Rusape, pasture research at, 947.

Salisbury: agricultural research station at, 947; native locations, 511; proportion of European population resident, 1380.

Segregation policy in: 159; economic aspects, 1417.

Statistical service, 1352.

Survey: 1087; cadastral, 8; railway development, 1574-5.

Taxation: European direct, income tax, poorer farmers not liable, 1382; land, unimproved, proposed, 819; mining, 1531;—gold royalty, 1531;—royalty system, 1530, 1531; native direct—collection, defects in system, 562;—defaulters, penalties, 562;—exemption, 562;—payment, 562;—poll tax, 562;—separate system, 378;—wives, 562; non-native direct—income tax, 549;—revenue from, 1459;—systems, 549;—unoccupied land, 549.

Tobacco Research Board functions, 947.

Trade: Asiatics engaged in, 1419; native, and currency question, 1419.

Transport, air: subsidy—Imperial Airways, 1601;—Rhodesia and Nyasaland Airways, 1601.

Union of S. Africa, relations with, 178; *see also under* Southern Rhodesia, constitution.

Wankie, coal-mining area, 1494.

Water-supply: boreholes, 1040; dams, 1039;—storage, 1086; drinking-water problem, 1040; irrigation, 1086;—area irrigated and projected, 1039;—considerations restricting, 1039; shrinkage, 1085; storage-works, 1040; watershed protection and forest conservation, 991.

Spain: Berlin Act signatory, 1341; Forced Labour Convention ratified, 629.

Spearman, C., definition of intelligence, 38.

Speed, Sir E. A., land tenure, native rights in Ibadan inquiry, 839.

- Squatters, *see under* Labour; Land; Kenya, land, labour; Union of S. Africa, land, labour.
- Stallard, Col., leader of Dominion party, Union of S. Africa, 146.
- Stanley, H. H.: 1310; population estimates, 104.
- Statistical Year-Book of the League of Nations*, 107.
- Statistics, unreliability and lack of uniformity, 1353-4; *see also under* subjects and territories.
- Statute of Westminster, British Empire relationships defined, 146.
- Stebbing, Prof. E. P., forest protection belts in W. Africa, proposals, 1003.
- Stefanopoulos, Dr. G. J., yellow fever preventive inoculation, 1129.
- Stephens, Dr., trypanosomiasis research, 1130.
- Stewart Readers*, 84.
- Stockdale, Sir F.: agricultural education at Yaba, recommendations, 967; agricultural training of Africans, recommendations, 965; Br. W. Africa—agricultural publications, recommendations, 958;—proposals for agricultural co-operation, 957; mixed farming system, recommendations, 963; small holdings, views, 969; stock-breeding in W. Africa, views, 977.
- Study of the Kanuri Language*, by Dr. J. Lukas, 92.
- Sudan: grassland area, 13; Imatong Mountains, coffee varieties introduced to Uganda, 950; linguistic adviser, 80; linguistic expedition, 73; relapsing fever, spread, 1136; *see also under* Anglo-Egyptian Sudan.
- Sudan, Inner, language group, 77.
- Sudan Plantations Syndicate, Gezira scheme control, 1053-4, 1404.
- Sudan, Southern: language of, 74; visit of Dr. Westermann, 80.
- Sudanic language group, 75, 76, 77, 88.
- Sudd area: 7; aerial survey in, 10.
- Süd-Kamerun Gesellschaft*, concession obtained, 788.
- Suk people: description, 29; erosion in reserves, 1070, 1095; livestock, numbers owned by, 1095.
- Sukuma language, 88.
- Sukuma people, grazing lands delimited, 847.
- Sumner, Lord, land rights in S. Rhodesia, report by, 733.
- SURVEY:
- aerial: 10-11; commercial companies and, 11; forests, 1011; Fr. W. Africa, 11; Katanga area, 11; photography, 10; Tanganyika, 11; Uganda eroded areas, 1101.
- Anglo-Egyptian Sudan, geodetic, 7.
- Bechuanaland water-supply development and, 1037.
- Belgian dependencies, 6.
- British Air Survey Committee, 10.
- British dependencies: cadastral, 5, 8; Colonial Office, and survey development policy, 6; geodetic, 5; Hydrographic Department of Admiralty, 5; topographic, 5, 1613; town planning, 5; trigonometrical, central department for E. Africa suggested, 5.
- Br. E. Africa: employment of natives, 9; trigonometrical survey, 5.
- British Empire Survey Officers, conferences, 6, 1626.
- cadastral: extent in Africa, 5, 959; in native areas, 8; in relation to settlement, 8; statistics of agricultural production dependent on, 959.
- Colonial Development Fund grant, 1045.
- Conference of Empire Survey Officers, 6, 8, 1626.
- co-ordination, need, 9.
- development loan advocated, 6.
- ecological: 954; N. Rhodesia, 1010, 1088-9.
- Egyptian government, 10.
- erosion and water-supplies, Tanganyika, 1093.
- forestry: and need for, 992; in N. Rhodesia, recommended, 994.
- French dependencies: native employment, 109; organization, 10; *Service Géographique de l'Armée*, Paris, 6.
- geodetic: 6-8, 1611; Imperial Geodetic Department, suggestion, 5.
- geological: 1516-18, 1611; extension required, 1536.
- geophysical, for S. Rhodesia water-supplies, 1040.
- Gold Coast employment of natives, 9.
- health and medicine: leprosy in Br. E. Africa, 1142; value, 1152; yellow fever, by Health Division, Rockefeller Foundation, 1127.

Survey (*cont.*)

- hydrographic, in Tanganyika, 1045.
- Imperial Geodetic Department, suggestion for, 5.
- Kano, Native Administration Department, 9.
- Kenya: cadastral in relation to settlement, 8; Perkerra river irrigation scheme, 1042.
- Kigoma, geodetic progress, 7.
- labour, in Belgian Congo, 642, 645.
- land title registration by, 876, 877-8.
- meridian, 30th arc, completion needed, 7, 1613.
- metric system, uniformity need for, 9.
- mineral, 1516-18.
- mutala surveys, Uganda, 954.
- native employment in, 9.
- Nigeria: employment of Africans, 9; regional survey, 1000; water supplies, 1047.
- organization for, 5-6.
- pastoral land for anti-erosion, measures, 1066.
- Portuguese colonies, 6.
- projection methods, 8-10.
- regional, in N. Nigeria, 1000.
- requirements in Africa, summary of, 1666.
- soil conditions, need for, 1107.
- S. Rhodesia, cadastral in relation to settlement, 8.
- Sudd area, 10.
- Survey Committee, Colonial Office, 5.
- surveyors, licensed, Africans qualified, 9.
- Swaziland irrigation plans and, 1038-9.
- Tanganyika: education of Africans, 9; Survey Department, geodetic progress, 7.
- topographic, 5; 425.
- triangulation, progress in Africa, 7-8.
- trigonometrical, 5.
- Uganda: 8; employment of Africans, 9; geodetic, 7.
- underground water-supplies in Union and, 1033.
- Union Minière du Haut Katanga*, survey work, 8.
- Union of S. Africa: cadastral in relation to settlement, 8; maps, deficiency, 5; Orange Free State, topographical, 8; trigonometrical survey, 5-6.

Survey (*cont.*)

- water supplies in Nigeria, northern, 1047.
- Zanzibar, aerial, 11.
- Sutherland mining concession in S. Rhodesia, 732.
- Swadesh, Dr. M., Assistant Professor of Linguistics at Wisconsin University, 101.
- SWAHILI LANGUAGE: 78, 79, 87-8, 97; African attitude to, 89; Arab spread of, 317; Arabic influence on, 89-90; commercial use, 96; dialects of, 90; E. African lingua franca, 88-91; educational use of in British dependencies, 1257-9; essay competition in, 69; Kingwana form of, use in Belgian Congo, 95, 1275; in Kenya, 88; lingua franca, 89; literature in, 90-1; in N. Rhodesia, 86; origin and characteristics, 89-90; orthography, 90; publications in, 88; Tanganyika land ordinances, place in, 828-9.
- Swazi language, literature in, 82.
- Swaziland, *see under* High Commission Territories.
- Sweden, Berlin Act signatory, 1341.
- Swynnerton, C. F. M., Tanganyika Tsetse Department directed by, 1132.
- Syrians: commercial activity, W. Africa, 1425; immigrant community in W. Africa, 316; traders, credit facilities, advantage over African, 1428.

T

- Talbot, P. A., seconded for anthropological inquiry in Nigeria, 47.
- Tale of Two Cities, A*, popularity among natives, 1294.

Tanganyika, British Mandate.

AGRICULTURE:

- crops: beeswax, native production, 891; cacao, native cultivation, 907; coco-nuts and copra—Arab production, 914-15;—copra improvement, 915;—European production, 914-15;—Indian production, 914-15;—native production, 914-15; coffee—Agricultural Dept. experiments, 910;—anti-erosion measures, 1092;—European cultivation, 909-10;—Native Co-operative Union markets, 1472;—native cultivation,

Tanganyika, British Mandate—Agriculture (*cont.*)

909-10;—native marketing society, 1473; cotton—exports, 1390;—Kilombero valley cultivation scheme, 1043;—native cultivation, 903; fruit, citrus, experimental stage, 917; groundnuts—exports, 1390;—native cultivation, 898; maize, native cultivation, 892; millets, native cultivation, 892; pests and disease control, 970; rice—Kilombero valley cultivation scheme, 1043;—native cultivation, 894; sesame, native cultivation, 899; sisal—cultivation methods, 1390;—European production, 926;—exports, 1390;—Indian production, 926; tea—cultivation methods, 1390;—European production, 924; tobacco—European production, 916, 925;—government assistance, 916;—native co-operative marketing society, 1473;—native cultivation, 916.

education: 966; schools, 966, 969.

European: co-operation, 1470; maize, 921; mixed farming, 1390; plantations, 919; products, principal, 919; sisal, 926; tea, 924; tobacco, 925.

Indian: capital invested, 341; sisal, 926.

livestock: cattle—death, failure to report, 660;—meat industry, 939, 1093; dairying—ghee, co-operative societies, 1473;—ghee production, 942-3; dipping, provision for, 974; disease, tuberculosis, 1140; hides and skins, 940;—exports, 1390; overstocking, estimate of extent, 1091; stock-breeding, 976;—British breeds used, 931; veterinary training of natives, 978.

native: co-operative credit and marketing societies, 1473; cotton, marketing, 1422; education, 966, 969, 1246; ghee, co-operative societies, 1473; marketing, Native Co-operative Union, 1472; small holdings, development of scheme, 969.

organization: sisal, 926; tea, 924.

research: 948; coffee, 948; East African Agricultural Research Station, Amani, centre for, 955 (*see also under* British East Africa, Amani); Empire Cotton Growing Corporation, work, 945; experimental forms, anti-

Tanganyika, British Mandate—Agriculture (*cont.*)

erosion work, 1093; pasture, 973; sisal, 926, 948.

Amani research station, *see under* British East Africa, Amani Agricultural Research Station.

Anthropological inquiry on land tenure, 47.

Aviation, *see under* Tanganyika, transport.

Bantu inhabitants of, 22.

Bena people, political organization of, 23.

Berlin Act includes, 1341.

Bukoba District: German administration, 435; land tenure, native—customs studied, 838;—nyarubanja title, transfers, 848; native authorities, land tenure rules by, 830; Nyakoto, coffee growing centre, 948.

Census in, 113-14.

Chaga people, political struggles of, 23. Chamber of Commerce, representation on Education Committee, 1238.

Civil service: conditions of service, 225; employment of Africans and Asiatics, 224, 233-4; local service constituted, 233; native administration in relation to, 227.

Companies operating in, 1389, 1390.

Co-operation: European, 1470; native, 1472-3;—advisory officer for, 1472;—discontent over prices, 1472-3; tobacco marketing society, 916.

Customs union with Kenya and Uganda, 184, 1344-5.

Dar-es-Salaam: administration of, 438-9; leper settlement, government, 1142; native population, administration, 519; tobacco trade in, 926.

Defence, expenditure, 1439.

Economic system: Customs union, 184; European—agricultural character, 1389-90;—natives dependent on, 1393-4.

Education:

European, 1260.

Indian, 341-2, 1260.

native: Advisory Committee, composition, 1238-9; agricultural, 966, 969, 1246; anti-erosion, 1092, 1110; art, study of reaction to pictures, 1304; chiefs' sons, 1257; departmental courses, 1246-7; fees, 1288;

Tanganyika, British Mandate—Education (*cont.*)

female, 1256; Higher College, contribution to cost, 1249; language policy, 87-8, 1258-9; medical—scholarships granted, 1189;—subordinate staff, 1188-9; provincial committees, functions, 1239; schools—agricultural, 1246;—chiefs' sons, 1257;—co-educational, 1256;—government, 1234, 1251;—native administration, finance and control, 1240-1;—native authority, 1233;—registration, categories excluded, 1242;—secondary grade, 1243; secondary, 1243; tax replaced by poll tax, 550; teacher training facilities, 1251; technical, 1246-7; vocational, 1246-7;—'Rural Industries' courses, 1244.

Erosion: control measures, 1091-3; extent, experiments, 1091; Interdepartmental Committee for, 1092; strip-planting as preventive, 996.

Estates: German, disposal after War, 1389; nationalities owning, 1389.

Exports: beeswax, 891; bullion, 1389; cocoa, native produced, 907; coffee, 909; copra, 915; cotton, 903, 1390; decline in value, 1328; to Germany, 1339; ghee, 943; groundnuts, 898, 1390; hides and skins, 940, 1390; Kenya, 1330; mangrove bark and beams (*borite*), 1014; percentage to—British Empire, 1331;—Germany, 1330;—Great Britain, 1330-1; rice, native grown, 894; sisal, 926, 1390; timber, 996; transit through Kenya, 1330-1.

Finance: capital—investment, 1318;—public listed, 1319; debt, 1439, 1447;—charges, 1350; expenditure—defence, 1439;—main heads, 1439;—pensions, 1350;—roads, 1555;—social services, 1434; German administration, 1439; imperial grants, 1439, 1448; railways, 1579; revenue—fluctuations, 1439;—main heads, 1439;—mining, 1461;—native tax, 1458;—non-native direct tax, 1459.

Forests: administrative control, 996; afforestation methods, 996; 'close', area, 995; Colonial Development Fund grant, 997; conservation, native authorities' duties, 1023; deforestation, 995; destruction prohibited,

Tanganyika, British Mandate—Forests (*cont.*)

1093; economic exploitation—gold-mine concessions, 996;—saw-mills, 996; forestry service—African training, 1020;—staff, numbers and training, 996; investigation, progress, 1011; native authorities—control duties, 996;—communal area, 995; non-native private, 995; research, extension required, 996-7; reserves, state, area, 995; *taungya* planting, 996; training establishments, Aroshe Rangers School, 996; tree belts as erosion control, 1093.

German settlement, 1389-90.

Government: Closer Union question, 167, 181, 182-5;—and mandated status, 183-4; East African federation, and question of inclusion, 181; executive council, 163-4; German administration, and organization of tribes, 23; labour recruitment policy, 642; land tenure policy 848; legislative council, 164;—Africans to be included, 164;—Indian representation, 341;—oath of allegiance required, 164.

Governor of (Sir D. Cameron), stimulation of native agricultural production, circular, 631-2.

HEALTH AND MEDICINE:

disease: helminths, case rate, government institutions, 1147; leprosy, cases segregated, 1142; plague, endemic centre, 1135; trypanosomiasis, protection by intravenous injection, objections, 1133; tuberculosis, prevalence, 1139; venereal, cases treated, government institutions, 1145.

dispensaries, tribal, 1164.

government grants, medical missions, leper settlements, 1142.

health services: native subordinate staff, training, 1188-9; organization, staff and expenditure, 1164-5; representation on Education Committee, 1238; tribal dressers, training, 1189.

hospitals: government, accommodation and patients, 1164-5; mental, 1151.

leper settlements, government, 1142.

missionary work: 1118; leper settlements, 1142.

Tanganyika, British Mandate—Health and Medicine (*cont.*)

research: Colonial Development Fund grants, 1164; institutions, 1161; malaria, 1164, 1624; trypanosomiasis, 1164, 1619, 1624; tuberculosis, 1164.

sanitary control, sleeping sickness, medical passports, 1200.

Hehe people, political organization of, 23.

Immigration into, from Portuguese territory, 639.

Import duties: customs union with Kenya and Uganda, 184, 1344-5; revenue from, 1439.

Imports: Germany, proportion, 1338; Japanese, percentage, 1337; proportion—British African, 1335;—of different, 1335; timber, 996; value per head of population, 1334.

Indians: 340-2; trading activities, 1422; *see also under* Indians, in Tanganyika.

JUDICIAL SYSTEM: Arabs subject to non-tribal courts, 317; corporal punishment—labour offences by juveniles, 661;—regulations, 442; courts for native mine workers, 519; juvenile offenders—corporal punishment, 661;—reformatories, 313; native courts, 441-3;—appeals from, 287-8;—appellate powers, 307;—competence, 441-3;—non-tribal natives, 518-19;—organization and jurisdiction, 441-3;—supervision, 442.

Kilimanjaro area: Chaga coffee plantations, 1472; cultivation and erosion, 1472; forests, stock enumeration, 1011; lands, demarcation, 847; maize plantations, 921; Native Planters' Association, failure, 1472.

Kilimanjaro, Mount: cultivation, terracing, 1064; native irrigation system on, 1043-4.

Kingolwira area: Empire Cotton Growing Corporation, research, 945; peasant farms, tenure on, 848.

LABOUR, NATIVE: child labour, 677; Committee on Supply and Welfare, recommendations, 676-7; Committee (1938), recruitment recommendations, 654-5; communal labour, 610; compulsory—agricultural production, powers, 631;—regulations, 618; disablement compensation, 676; employees, numbers, 607; migration,

Tanganyika, British Mandate—Labour, Native (*cont.*)

702, 707; mine conditions, 676-7; offences—corporal punishment, 661;—penalties, 660;—statistics, 662; porterage—numbers employed, 1538-9;—porters requisitioned, number, 618;—restrictions, 629; private employment, recruitment organizations, 654; registration, system unapplied, 670-1; sisal industry, 926; skilled employment, 692; supply, 649, 693; tax payment by work, 568, 620-1; wage determination, committee's recommendations, 695; welfare supervision, 676-7.

labour, non-native, wages, agricultural, 1390.

Lacustrine kingdoms in, 23-4.

Lake Victoria region, lands, permanent demarcations, 847.

LAND:

alienation: area affected, 768;—under Germans, 765; European holdings, 1389; native fears, 765-6; occupied by natives, regulations and procedure, 824; policy laid down, 764-5; state, terms, 825-6; white settlers, 766-7.

Arab tenure, 317.

German policy, 763-4.

Governors' Conference (1926) and development policy, 767.

holdings: European, 341; German, 341; Indian, 341.

law: individual titles, 848, 853; regulating ownership, term 'native' defined, 828-9.

native: mineral prospecting regulations, 1521-2; rights declaration, 764-5;—policy, 767-8.

non-native, area, 768.

sovereignty defined, 764.

survey: developmental, 767; and forest reconnaissance, 1011.

tenure: agricultural improvement and customary, 837; Bantu customs studied, 838; Chaga customs and systems studied, 831, 838; changes in customary, 847-8; individual title and method of obtaining, 848; legal position, 848; Moslem law adaptation, 848; occupancy rights, 848.

Language: 87-8; Inter-Territorial Language Committee, 90.

Tanganyika, British Mandate (*cont.*)
 Law, water rights, 1045.
 Legislation: co-operation, native, 1472;
 Co-operative Ordinance, 1470; native
 authorities—instituted, 436;—powers
 determined by, 440;—powers of,
 440-1.
 Lindi District: administration of, 439;
 land transactions recorded by courts,
 848.
 Machame, chief of, and coffee price
 riots, 1473.
 Marketing: agricultural produce, co-
 operative, difficulty of combining
 native and non-native, 1470; *see also*
under Tanganyika, co-operation, trade.
 Masai people, administration of, 439.
 Meru forests, enumeration of stock,
 1011.
 Meru, Mount, native irrigation system
 on, 1043-4.
 Meteorological service in, 15.
 Mikindani District, administration of,
 439.
 Minerals: coal and iron, 1498; dia-
 monds, 1513; exports, 1389; German
 development, 1497; prospecting on
 native lands, 1521.
 Mines: Department of Lands and
 Mines, 1497; diamond, area and pro-
 duction, 1513; forest concessions, 996;
 geological survey, 1497; gold—de-
 velopment, 1497-8;—digger popula-
 tion, 1389;—Lupa field begun, 1497;
 —production, 1498;—small mines,
 assistance, 1498; Lupa gold fields—
 erosion, 1091;—labour conditions,
 676-7; native workers, special courts,
 519; regulation, 1526; research, 1498;
 revenue contribution, 1461; road
 construction for, 1555; taxation,
 royalty system, 1530, 1531; tin pro-
 duction, 1498.
 Minziro forests, enumeration of stock,
 1011.
 Missions: educational work, 1251, 1256;
 medical work, 1118; representation
 on Education Committee, 1238;
 teacher training, 1251; White Fa-
 thers, medical work, 1118.
 Mkalama, government leper settlement,
 1142.
 Mlingano, sisal experimental research
 station, 926, 948.
 Morogoro: Empire Cotton Growing

Tanganyika, British Mandate—Moro-
 goro (*cont.*)
 Corporation research, 945; head-
 quarters of agricultural department,
 948.
 Moshi district, riots over coffee prices,
 1472.
 Moshi, government leper settlement,
 1142.
 Mpanganya, Empire Cotton Growing
 Corporation, research, 945.
 Mpwapwa, erosion, soil loss, 1091.
 Mwanza, subdivision of occupied hold-
 ings near, 847.
 NATIVE ADMINISTRATION: Akidas under
 German system, 435; British system
 of, on assuming control, 435-6; cen-
 tral council envisaged by Sir D.
 Cameron, 531; chiefs—salaries, 437;
 —tribute abolished, 437; difficulties
 of system, 439; education duties,
 1240-1; German system, 435; govern-
 ment policy, 227; grants, 1439; head-
 men, place in system, 438; health
 work, 1164; indirect rule introduced
 (1923), 435-6; Jumbes under German
 system, 435; native authorities—anti-
 erosion rules, 1092;—composition and
 organization, 437-8;—conferences,
 443;—expenditure, 440;—forest con-
 trol duties, 996;—institution, 436;—
 land tenure transfers registered, 848;
 —powers and duties, 440-1;—schools
 maintained, 1233;—tax duties, 569;—
 —water-supply work, 1045; native
 councils, resources compared with
 Kenya, 392; native courts, *see under*
 Tanganyika, judicial system; native
 treasuries—institution under Ordi-
 nance (1926), 436;—numbers and
 resources, 439-40;—revenue, 569;—
 Nigerian influence, 138; non-tribal
 native, 518-19;—courts, 518-19;—
 miners' special courts, 519; paramount
 chief as chief Native Authority, 437;
 schools for tribal dressers maintained,
 1189; sleeping-sickness control, 1132;
 state of, at present time, 443;
 'superior native authorities' con-
 stituted in some areas, 439; tribal
 council, composition, 437-8.
 Nyamwezi people, political struggles of,
 23.
 Planters' Association, representation on
 Education Committee, 1238.

Tanganyika, British Mandate (*cont.*)

Police and prison services, expenditure, 1439.

Population: concentration and erosion, 1093; density, 2; Indian, 341; non-native census and classification, 117; study by C. Gillman, 115; survey, 128; Tabora District, 114; water supply and distribution, 1044.

Porterage, *see under* Tanganyika, labour (native).

Postal service amalgamated with Kenya and Uganda, 184.

Press: *Mambo Leo*, government newspaper, value, 51; Swahili children's newspaper, 88; vernacular publication, 51, 88, 1295.

RAILWAYS: competition with Kenya-Uganda system, 1579-80, 1581; co-ordination with Kenya-Uganda system, project, 1581; development, reasons, 1604; finance, 1440, 1579, 1605, 1607; financial position, Sir S. Armitage-Smith's opinion, 1607; German construction, 1578; government ownership and management, 1579; grants to, 1439; Lake Victoria traffic, pooling agreement, 1580-1; lines and mileage, 1578; military construction, 1578; native employees, 1581; Northern Line, competition with Kenya-Uganda system, 1581; post-war reconstruction, 1579; road competition, co-ordination inquiry, 1555-6; Tanga line construction, 1389; traffic, 1579;—and rates agreement with Kenya-Uganda Railways, 1580-1; transfer to mandatory, 1578-9.

Roads: construction, programme and cost, 1555; mileage and routes, 1555; motor services, 1555; Public Works Dept. administration, 1555; railway competition, co-ordination inquiry, 1555-6; toll proposal rejected, 1610; war-time construction, 1554.

Shinyanga, Tsetse Department at, 1132.

Shume-Magamba forests, enumeration of stock, 1011.

Southern Highlands, tin production, 924.

Survey: aerial, 11; education of Africans for, 9-10; erosion and water supply, 1093; hydrographic, 1045.

Swahili in, 88.

Tanganyika, British Mandate (*cont.*)

TAXATION:

mining, royalty system, 1530, 1531.

native direct: assessment method, 569; collection system, 569, 589; defaulters, labour liquidation of debt, 620; exemption provisions, 568; graduation, 569-70;—investigated, 598; house tax, rate, 568; hut tax—under German administration, 567;—under mandatory government, 567-8; justification, 595; native authorities and collection, 589; payment—by instalments, 569;—by labour, 568, 620-1; poll tax—under German administration, 567;—under mandatory government, 567-8; profits tax, provision for, 570; rate raised (1922), 436; registers of taxpayers, compilation, 569; revenue from, 1439, 1458; wives, 568, 570.

non-native direct: education tax withdrawn, 550; income tax, introduction considered, 550; poll tax, 550; revenue from, 1459.

transport, road, proposal, 1610.

Trade: balance, 1350; Indians engaged in, 1422; native marketing control, and Indian opposition, 341.

Transport: air—aerodromes maintained, 1600;—expenditure, 1601;—gold carried, 1603;—subsidy—Imperial Airways and Wilson Airways, 1601; facilities, insufficient, 1608.

Tsetse fly: Department, functions and work, 948, 949, 1011, 1132; distribution, 1129; government policy, 1091; overstocking and, 1090.

Ujiji, administration of, 439.

Ukerewe Island: cultivation methods, terracing, 1064; lands, permanent demarcations, 847.

Usambara area, tea production, 924.

Usiha, chief, anti-erosion rules, 1092.

Vital statistics: 114; Kahama District, 114.

Water supply: boreholes, 1044-5; Colonial Development Fund grant, 997; dams, 1045; deficiency, 1389; drinking-water question, 1044; hydrographic survey, 1045; irrigation—German plans, 1043;—Kilombero valley project, 1043;—native system, 1043-4; water rights, legal position, 1045.

Tanganyika, British Mandate (cont.)

White settlement: 4; claims advanced, 766.

Zararmu people, political organization of, 23.

See also under British East Africa.

Tanganyika, Provinces.

Central Province, erosion, 1091.

Iringa Province: anti-erosion measures by native authorities, 1092; tobacco production, 925.

Lake Province: erosion, 1091; grazing experiments, 1093; native authorities, anti-erosion measures, 1092.

Tanganyika Concessions, Ltd.: Benguela line plan, 1594; *Union Minière*, share in, 1594-5.

Tangata, Nyasaland custom of labour rent, 758.

Tana river, navigable limits, 1543-4.

Tati Concessions Company: area held by, 731; Bechuanaland interests of, 403.

Tatoga language, 77.

Taungya, Burmese tree-planting method, 988, 992.

Taxation.

Direct: comparative effect on natives and Europeans, 594; importance of, 546; incidence, *table*, 547; income tax—advantages of, 1463—considerations governing rate, 1463-4;—territories applying, 1463 (*see also under Taxation, native direct, non-native direct*); mining—considerations governing, 1462, 1529-30;—profits, 1531-3;—royalties payments, 1530-1; *see also under territories and Mines*; non-native, 546-53; *see also under Taxation, non-native direct.*

NATIVE DIRECT:

adjustment of: methods discussed, 595-8; minor adjustments attempted, 598.

administrative attitude to, discussed, 595-6.

age-limits as assessment basis, 598.

agriculture affected by, 884-5.

assessment: administrative difficulties, 596-7; discrimination in, advantages, 595-6; flat rate, advantages and disadvantages, 596.

assessment and collection: Fr. Equatorial Africa, 591; Fr. W. Africa,

Taxation—Native Direct (cont.)

589-90; methods of, discussed, 598; by native authorities, discussed, 598-600; position of administrative officers, 601; possible improvements, 601-2.

Belgian Congo, 593.

busulu tribute, Uganda, 575.

Cameroons, Br. Mand., 583-5.

Cameroons, Fr. Mand., 591-2.

capitation: Belgian Congo, 593;

Cameroons, Fr. Mand., 591-2;

Fr. Equatorial Africa, 591; Fr. W. Africa, 588-9.

cattle tax, *see under Taxation, native direct (livestock).*

centres extra-coutumiers, Belgian Congo, 525.

chiefs' tribute, Sierra Leone, 588.

community tax, Tanganyika, 568.

defaulters, provision for working out debt, 620-1.

French dependencies, 588-93.

Fr. Equatorial Africa, 590-2.

graduation by districts discussed, 597-8.

grazing fees, S.W. Africa, 558.

house tax: Cameroons, Fr. Mand., 592; Sierra Leone, 587-8; Tanganyika, 568-70.

hut tax: Basutoland, 558-60; Bechuanaland, 560; Kenya, 570-5; N. Rhodesia, 563; Nyasaland, 566-7; Tanganyika under Germans and mandatory, 567; tuberculosis infection affected by, 1139; Uganda, 575; Union of S. Africa, 554-8.

hut and poll tax: Basutoland, 558-60; Kenya, 570; incidence:—French and British territories, 595;—Fr. Equatorial Africa, 591;—Fr. W. Africa, 591;—increasing, attempts to adjust, 597-8;—relative real, difficult to compute, 595;—urban and industrial populations, 600, 601.

income tax: Cameroons, Br. Mand., 584-5; French dependencies, 592; Nigeria, 550, 577-81; Togo, Fr. Mand., 592.

inelasticity for financial purposes, 1357. instalment payments, adoption of, 598.

jangali (cattle tax) in Nigeria, 577-8, 589, 597; *see also under Taxation, native direct (livestock).*

justification for, 594-5.

labour: luwalo dues, Uganda, 575-6;

Taxation—Native Direct (*cont.*)

migrant labour, difficulties, 600-1;
recruitment by—in British dependencies, 639-40;—in Union of S. Africa, 637; supply and, 596.

land: Buganda, 575; occupation tribute (*busulu*), Uganda, 575.

livestock: advantages and disadvantages, 597; Cameroons, Fr. Mand., 592; *jangali* in Nigeria (cattle tax), 577-8, 579, 589; *pacage*, French dependencies, 589; surplus cattle, Ruanda-Urundi, 1071.

luwalo, labour due, in Uganda, 575-6.

medical, Togo., Fr. Mand., 592.

migrant labour, difficulties discussed, 600-1.

migration to urban areas caused by, 594.

Moslem systems in Fr. W. Africa, 589.

native authorities, tax-collecting, and supervision problems, 599-600.

native treasuries: contributions for, Belgian Congo, 593; requirements, 594-5.

payment by labour, 620-1.

personal tax, French dependencies, 552.

poll tax: Basutoland, 558-60; Bechuanaland, 560; Kenya, 570, 574-5; medical treatment payment from, suggestion discussed, 1202; Nigeria, pagan areas, 579; N. Rhodesia, 563-5; Nyasaland, 566-7; S. Rhodesia, 562; Swaziland, 561-2; Tanganyika under German and mandate administration, 567; Uganda, 575; Union of S. Africa, 554-8.

poll and hut tax: Bechuanaland, 560-1; Union of S. Africa, 554-8.

prestation, see under Taxation, native, and non-native direct.

problems of, discussed, 594-602.

profits tax, provision for in Tanganyika, 570.

rent, Buganda, 575.

revenue, proportion of total from, 1458-9.

rubber, Fr. Equatorial Africa, 590-1.

social problem, 593.

study of native conditions required, 597.

summary and conclusions, 1647.

Togo., Fr. Mand., 592.

tribute tax: Gold Coast, Northern Territories, 585-6; Sierra Leone, 588; Togoland, Br. Mand., 586-7.

Taxation—Native Direct (*cont.*)

urban and industrial populations, taxable classes, 600.

urban house property, Togo., Fr. Mand., 592.

wives: assessment basis, 598; Basutoland, 559; Bechuanaland, 560; Belgian Congo, 593; N. Rhodesia, 563; Nyasaland, 566; S. Rhodesia, 562; Swaziland, 561; Tanganyika, 568-70.

yard tax, Gambia, 588.

NATIVE AND NON-NATIVE DIRECT: dog tax—S.W. Africa, 558;—S. Rhodesia, 562; house tax, French dependencies, 552-3; *prestation*—Cameroons, Fr. Mand., 591-2;—French dependencies, 624-6;—Fr. W. Africa, 588-9;—Togo., Fr. Mand., 592; urban land, 553.

NATIVE INDIRECT: cocoa duty in Gold Coast, 585; customs duties in Gold Coast, 585; Togoland, Br. Mand., 586.

NON-NATIVE DIRECT: Belgian Congo, 553; British dependencies, 549-52; education tax, Tanganyika, 550; French dependencies, 552-3; High Commission Territories, 549; home values, Tanganyika, 550; incidence, reasons for high rate, 1463-4; income tax—Cameroons, Br. Mand., 550;—French dependencies, 552;—High Commission Territories, 549;—Kenya, provisions for (1937), 551;—Nigeria, 549-50;—N. Rhodesia, 549-50;—Nyasaland, 549-50;—S. Rhodesia, 549;—Tanganyika, introduction considered, 550;—Union of S. Africa, 546-8; Kenya, 550-2;—history in, 550; land unoccupied, S. Rhodesia, 549; personal tax—French dependencies, 552;—N. Rhodesia, 556;—Nyasaland, 550;—Union of S. Africa, 548; poll tax—High Commission Territories, 549;—Kenya, 550-1;—Nyasaland, 550;—Sierra Leone, 552, 556;—Tanganyika, 550; Uganda, 550, 552; revenue from, 1459; S. Rhodesia, 549; systems discussed, 553-4.

revenue, question of increase, 1462-3.

transport, competitive road, 1609-10.

Taylor, F. W., work on Fulani, 92.

Teale, Sir E., Tanganyika native irrigation system investigation, 1044.

Teita people, land sale practised by, 850.

- Temne language, 80, 95.
 Temne people, land tenure studied, 840.
 Temporary Slavery Commission, *see*
under League of Nations.
 Teso language, 88.
 Teso people, described, 29.
 Tessmann, G., land tenure of Pangwe
 described, 840.
 Theiler, Sir A., East Coast fever, research
 work, 934-5.
 Thomas, Rt. Hon. J. H.: negotiations
 with Gen. Hertzog on transfer of High
 Commission Territories, 174-5; pro-
 nouncement on union of N. and S.
 Rhodesia, 180.
 Thomas, Northcote, land tenure cus-
 toms of Ibo studied, 839.
 Thompson, A. Beeby: Kenya water sup-
 ply, report, 1042; Nigerian water
 supplies, investigation, 1046; Nigerian
 well-sinking, recommendations, 1047.
 Thompson, H. N., Nigerian forest re-
 serves, proposals, 1000.
 Thomson, Prof. J. G., studies of black-
 water fever, 1126.
 Thonga language, 82, 83, 96.
 Thonga-Shangaan language, 81.
 Thurnwald, Prof., government records
 used by, 51.
 Tiger Kloof Book Room, vernacular
 literature, 84.
 Toc H, *see under* Great Britain.
 Togoland, languages in, 76.

Togoland, British Mandate.

- administration: 172; British reorganiza-
 tion, 478; German, 478-9; integra-
 tion with Gold Coast, 478.
 agriculture: crops, cocoa, native co-
 operative marketing, 1476; native
 co-operation, 1476; station, 951.
 co-operation, native, 1476.
 health and medicine: disease, try-
 panosomiasis, treatment not com-
 pulsory, 1134; health services, or-
 ganization, staff, and expenditure,
 1169-70.
 labour, native compulsory, Gold
 Coast regulations applied, 620.
 judicial system: native courts, 478;
 southern section, 479.
 land: mineral rights, 1520; policy and
 land legislation, 779-80; sale, 780;
 tenure, native—customary, changes,
 858;—sales by chiefs, 858.

Togoland, British Mandate (cont.)
 language, 94.

- minerals, rights, ownership, 1520.
 native administration: indirect rule
 policy introduced, 478; native trea-
 suries, revenues, 586-7; northern
 section, 478; southern section, 479-
 80.
 northern section: native authorities,
 appointment and powers, 478; native
 courts, composition and competence,
 478; native treasuries, revenue, 478;
 taxation, 586-7.
 southern section: Native Administra-
 tion Ordinance (1932), provisions,
 479; native authorities in, 479-80;
 native treasuries in, 479-80; taxa-
 tion, 586; tribal disintegration, 479.
 taxation, native: direct—justification
 for, 595;—northern section, 478,
 585-7; German system, 586; indirect
 in south, 586; native authorities
 power to levy, 586; tribute tax in
 north, assessment and allocation,
 587.
 vital statistics in, 119.
see also under Nigeria.

Togoland, French Mandate.

- agriculture: crops—cacao, cocoa ex-
 ports, 1328;—coco-nuts and copra,
 native production, 915;—coffee,
 native cultivation, 910;—cotton, na-
 tive cultivation, 906;—ground-
 nuts, native cultivation, 898;—maize,
 native cultivation, 893;—millets, na-
 tive cultivation, 894;—palm pro-
 ducts, native production, 913-14;—
 pulses, native cultivation, 901;—
 shea nuts, native production, 890;
 —yams, native cultivation, 897;
 education, native, Porto Novo, Da-
 homey, 1267; Loan Board, powers,
 1479-80.
 banks, Agricultural Loan Board, 1479-
 80.
 capital, public listed, 1319.
 Chamber of Commerce, its constitu-
 tion and functions, 204.
 citizenship, conditions for acquiring
 status, 200.
 co-operation: native, 1478-9; *Sociétés*
de prévoyance, agricultural produc-
 tion, 914.
 education, African: adult, 1267;

Togoland, French Mandate—Education, African (*cont.*)

agricultural, 1267; girls, 1267; missionary participation, 1264-5; post-primary, 1267; primary, regional schools, 1267; special section, Victor Ballot school, Dahomey, 1267.

exports: beans, haricot, 901; cocoa, 1328; coffee, native grown, 910; copra, 915; cotton, native grown, 906; groundnuts, 898; maize, native grown, 893; palm oil, 914; percentage to France, 1331; tapioca, 896; yams, 897.

finance, public: loan, 1454; revenue, 1452-4.

forests: reforestation—French policy, 1006;—German policy and work, 1006.

government: administrative system, 190; chamber of commerce, constitution and functions in, 204; Commissioners of the Republic, powers, 193; *conseil d'administration*, its constitution, 202; mixed commune established, 205; native advisory councils, constitution, 203.

Governor, land policy advocated, 860.

health and medicine: disease—leprosy, prophylactic campaign, 1142;—trypanosomiasis, control organization, 1177; dispensaries, 1177; health services—organization, staff, and expenditure, 1176-7;—sanitary service, 1177; hospitals, patients, 1177; laboratories, Lomé hospital, 1177; maternity centres, 1177; missionary work, 1177.

judicial system, *régime disciplinaire de l'indigénat* extended, 277.

labour: compulsory, regulations, 614, 623; employees, numbers, 607; *prestation*—German use of, 625;—redemption, 624-5;—system, 624.

land: concessions, 790; legislation, 790; mineral rights, 1520; tenure—*constatation des droits fonciers de l'indigène*, applications under, 860;—*constatation des droits fonciers des indigènes*, process introduced, 860;—*immatriculation* system introduced, 859;—native, leasehold practice, 858.

Lomé: Council of Notables, Governor's land policy explained to, 860; post-primary school, 1267.

Togoland, French Mandate (*cont.*)

minerals, rights, ownership, 1520.

missions: education, African, participation in, 1267; free access granted under mandate, 1265; medical work, 1177.

native administration: native advisory councils, constitution, 203; village councils, 490.

population, enumeration methods, 123.

railways: lines and mileage, 1589; state ownership, and administration, 1589. roads, mileage and system, 1562.

Sociétés de Prévoyance: organization and work, 1478-9; promotion of agriculture, 898.

taxation: native direct, 592;—assessment and collection, 592;—income, 592;—medical, 592;—urban house property, 592; native and non-native, personal, 552; *prestation*, 592, 624-5.

du Toit, Dr. A. L., borehole water supplies, report, 1032-3.

Tonga language: articles published in, 86; orthography, 81.

Tonga peoples: initiation ceremonies, 24; land tenure system in Angola, 831.

Toro people, political organization in Lacustrine kingdoms, 23-4.

Torrend, Father, Ila-Tonga dictionary, 86.

Torrens, Sir R., land title system of, 763, 859, 876-7.

Trade: African share in, 1327;—comparative study, 1324-5; balance—adverse, 1352;—British areas, 1349-52;—considerations, for calculating, 1348-9, 1350-1;—leave pay, inclusion in estimate, 1350-1;—remittances, inclusion in estimate, 1350-1;—salaries, inclusion in estimate, 1350-1; export—basis for calculating excess over import, 1328-9;—decline in value, 1328;—importance, 1327; native, investigation required, 1417.

Trade winds, effect on rainfall, 13.

Transkei, *see under* Union of S. Africa.

Transport and Communications.

Agriculture, importance for, 1610.

Air:

Br. E. Africa, local services, 1599-1600.

Br. W. Africa, local services, 1600.

development in Africa, future of, 1603.

Transport and Communications—Air
(*cont.*)

- Elders' Colonial Airways, local services, 1600.
feeder and territorial services, 1599-1600.
finance and administration, 1601-2.
goods of high value sent by, 1602-3.
High Commission Territories, local service, 1599.
meteorological requirements, 1637.
problems connected with, 1603.
and rail, co-ordination possibilities, 1603.
Rhodesia and Nyasaland Airways, local service, 1599-1600.
Sanitary Control of Aerial Navigation, International Convention, 1128, 1152.
trans-African services: Belgian—Sabena route, 1597-8;—subsidies, 1602; British, 1596-7, 1598-9; British Imperial Airways—Beira route, 1598-9;—East Coast flying-boat route, 1597;—Kano extension, 15;—Khartoum-Lagos route, 1597;—London-Capetown mail, 1597;—routes, 1597-8;—subsidies received, 1601;—West Coast route project, 1600; *Deutsche Luft Hansa*, Gambia mail service, 1600; French—*Air Afrique* routes, 1597-8;—*Air France* West Coast flying-boat service, 1597-8;—Paris-S. America via Dakar route, 1598;—subsidies, 1602; main trunk routes, 1596-9; Portuguese services, 1598-9; Union of S. Africa services, 1597.
Union of S. Africa, local services, 1599.
value to African administrations, 1602-3.
Wilson Airways, local service, 1600.
yellow fever infection precautions, 1128.
Animals used, 1538.
Co-ordination: Br. E. African inquiry, 1555-6; all forms, problems, 1609-10.
Development in, and problems raised, 1359.
Economic development and, 1311, 1417.
Increase, diseases diffused, 1129.
Internal trade, provision of communications for, 1610.
Labour contract, regulations, 657-8.

Transport and Communications (*cont.*)

- Motor transport, *see under territories*, roads.
Policy in Africa, discussed, 1603-4.
Porterage: cost, 1540; extensive employment of, 1538-9; present use, 1539; *see also under Labour*, native, and *territories*, labour, native.
Problems in Africa, 1537-8.
RAILWAYS: Belgian Congo, 1591-4; Benguela-Katanga project, 1595; Cameroons, Fr. Mand., 1890-1; capital—foreign investment, 1316;—investment, public listed in British areas, 1321; compulsory labour on—abuses of system, 615-16;—in construction, 613-15; co-ordination with road, suggestions, 1609-10; development conditioned by mining, 1534; diamond discovery, influence on, 1311-12; erosion influenced by, 1058; extension, motor roads preferred, 1608; financed by administrations, 1604; financial results, 1604-8; Fr. Equatorial Africa, 1589-90; Fr. W. Africa, 1588-9; Gold Coast, 1586-7; governmental control, 1315-16; importance in development, 1315-16; Kenya-Uganda system, 1582-4; labour imported for construction, 613; mineral development and, 1604; need for, 1314; Nigeria, 1584-6; N. Rhodesia, labour policy, 691; Nyasaland, 1576-8; Portuguese colonies, 1594-6; private enterprise, 1604-5; Rhodesian system (North and South), 1571-6; Sekondi to Kumasi, reconstructed, 5; Sierra Leone, 1587; South African Railways, source of profits, 1316; summary and conclusions, 1601; Tanganyika, 1578-81; Togo, Fr. Mand., 1589; Union of S. Africa, 1565-71.
ROADS: agricultural expansion and, 1608-9; 'all-weather', S. Rhodesia construction, 1552; Basutoland, 1551; Bechuanaland, 1551; Belgian Congo, 1563-4; Cameroons, Br. Mand., 1559; construction problems, 1549; co-ordination with rail, suggestions, 1609-10; erosion influenced by, 1058; Fr. dependencies, 1561-3; Gambia, 1561; Gold Coast, 1559-60; Kenya, 1556-7; Nigeria, 1558-9; N. Rhodesia, 1553-4; Nyasaland, 1554; Portuguese colonies, 1564-5; preferred to railway

Transport and Communications—Roads (*cont.*)

- extension, 1608; Ruanda-Urundi, 1564; Sierra Leone, 1560-1; S.W. Africa, 1551; S. Rhodesia, 1552; Swaziland, 1551; Tanganyika, 1554-6; Uganda, 1557-8; Union of S. Africa, 1549-51; value in economic development, summary and conclusions, 1661-2.
- Sanitary control problem, 1200.
- Slave trade suppression, and development, 1538.
- Systems, inter-territorial in South and East, 1392.
- Water transport: Belgian Great Lakes Company, 1541; Cameroons, Br. Mand., river system, 1545; cheapness, 1540; Congo river system, 1547-8; Cross and Calabar rivers system, 1544-5; E. African system, railway connexions, 1541-3; Gambia river, 1543; Great Lakes system, E. Africa, 1540-3; Lake—Albert, service operating, 1542-3;—Nyasa, steamer service, 1541;—Tanganyika, steamer service, 1541-2;—Victoria service, 1542; navigable rivers, 1540; Niger river system, 1546-7; Nigerian river system, 1544-5; river system, Fr. W. Africa, 1545-7; Tano river service, 1543-4; Volta river, 1543; Zambesi bridge, railway connexions affected, 1541.
- Transvaal, *see under* Union of S. Africa.
- Trilles, Father, linguistic research, 77.
- Trinidad, Imperial College of Tropical Agriculture, *see under* Great Britain.
- Tropical Diseases Bulletin*: 1159; vital statistics in, 127.
- Tsetse fly: bush-burning for eradication, effects, 1001, 1101; cattle-keeping—and, 886;—conditioned by, 929; committee, research co-ordination, 1625; control measures, 1131-2; distribution, 1129; and eco-climate, 17; human and animal disease conveyed by, 1129; infection with trypanosomes by migratory labour, 1199-1200; migrations, 1129; overstocking affected by, 1087, 1090; research—and control, 1618;—in Kenya, 949;—special research department, Tanganyika, 948; strains of trypanosome transmitted, 1130; Tanganyika—areas infected, 1389;—research organization, 948, 1164.

- Tshekedi Khama, Bechuana chief, opposition to administrative reorganization, 411-12.
- Tsimo ea lesa, Basutoland chiefs' reservations, 609.
- Tswa language, grammar, 83.
- Tswana Language Board, and orthography, 81-3.
- Tswana people, land tenure system in Bechuanaland, 831.
- Tuaregs, racial classification of, 19.
- Tucker, Dr. A. N.: Bantu phonetics, 75; classification of languages, 76; language study, 72, 74, 77; research expedition, 73.
- Tukolor people, political organization as large state, 27.
- Tumbuka language, 87.
- Turkana desert, advance of, 1099.
- Turkana people: cattle-owners, 882; described, 29; erosion in reserve, 1070, 1095.
- Twi language, 76, 80, 92, 93.
- Twi-Fante language, 94.

U

- U 4, cotton strain, 945.
- Ubena, land tenure, native customs studied, 838.
- Übersee Gesellschaft*, financial operations in Tanganyika, 1390.
- Uganda.

AGRICULTURE:

- crops: coffee—breeding, 950;—erosion by cultivation method, 1100;—European cultivation, 923-4;—Indian cultivation, 923-4;—native co-operative marketing, 1473;—native cultivation, 910, 923-4; cotton—deforestation caused, 998;—effect on erosion, 1099-1100;—exports, 1327;—and tax, 905;—ginneries, 904, 1423;—Indian share in product, 342; cotton, native—buying association, 1423;—control board, 1423;—export system, 1423;—marketing control, 1422-3;—production, 904-5, 1392;—quality control, 1423;—taxation yield, 1442;—varieties grown, 904; eleusine, native cultivation, 893; groundnuts, native cultivation and marketing, 898; maize, native production, 892; rice, native cultivation, 894; rubber,

Uganda—Agriculture (*cont.*)

- 1016; sesame, native cultivation, 899; sisal, European production, 926; sugar, Indian share of product, 342; tea, European production, 924; tobacco—government supervision, 916-17;—native cultivation, 916-17.
- education: native training facilities, 967; schools—Bukalasa, 967;—Makerere College (training course), 967;—Serere, 967.
- European: coffee, 923-4; principal products, 919; rubber, acreage and production, 919; sisal, 926; tea, 924.
- Indian: coffee, 923-4.
- livestock: cattle, meat industry, 939; diseases, tuberculosis, 1140; hides and skins, 940; over-stocking, 1099-1100; reduction recommended, 1101; stock-breeding work, 976; stock farms, 950, 978; veterinary training of natives, 978.
- native: coffee, 923-4; compulsory cash crop production, 631; co-operative marketing, 1473; marketing, control and regulations, 1423-4; native cultivators and cotton prices, 635; small holdings, development of scheme, 969.
- pests and disease control, 970-1.
- research: 949; bananas, 950; East African Agricultural Research Station, Amani centre for, 955 (*see also under* British East Africa, Amani); Empire Cotton Growing Corporation contributions, 945; Entebbe laboratory, 978; Kadunguru cotton research station, 949; Kampala laboratory, 949; mutala surveys, objects, 954; veterinary laboratory, work, 949, 1203.
- soil: conservation project, 1101; fertility maintenance, 1101.
- tobacco: Advisory Committee, 917; experiment station, 916.
- Veterinary Department, staff, 949.
- Anthropological inquiries in, 48.
- Aviation, *see under* Uganda, transport (air).
- Bantu inhabitants of, 22.
- Berlin Act includes, 1341.
- Budongo forest, working plans, 1011.
- Buganda Agreement (1900), terms, 444.
- Busoga district, land tenure, native and Mailo system, 852.

Uganda (*cont.*)

- Capital: investment, 1318; public listed, 1319.
- Census in, 116-17.
- Civil service: African conditions of service, 234-5; conditions of service, 225; employment of Africans and Asiatics, 233; pensions, cost, 1442.
- Co-operation, natives, 1473.
- Customs and Excise: basis changed, 1342; customs union with Kenya and Tanganyika, 1344-5; revenue from, 1442.
- Eastern Province, Karamoja, sheet erosion, example, 1058.
- Economic system: European, natives dependent on, 1393; free trade established, 135; native—cotton industry, control and organization, 1422-3;—marketing regulations, 1423-4;—trade, 1424; tariffs, 1342, 1344-5; *see also under* Uganda, trade.
- EDUCATION:
- Indian, 343, 1260.
- native: advisory committee, composition, 1238; agricultural, 967, 1247; Buganda grants to district boards, 447; district boards, functions, 1239; Education Department and vernacular text books, 88; fees, 1288; female, 1256; finance—expenditure, 1142;—Higher Education Commission's recommendations, 1283;—native contribution, 1240; Higher College, contribution to cost, 1249; language policy, 88, 1258; medical subordinate staff, 1190; medical training, Mulago Medical School, 1166, 1183; schools—agricultural, 1247;—farm, 1244;—King's College, 1256;—missionary, 1233;—technical, 1247; secondary, 1243; taxation for, in Bunyoro and Toro, 576; teachers—training facilities, 1251;—women, training facilities, 1252; technical, 1247; vocational, courses adopted, 1244.
- Entebbe: Human Trypanosomiasis Institute, 1127; leprosy, extent, 1142; medical research conferences at, 1203-4.
- Erosion: bush burning for tsetse eradication, 1101; causes, 1099-1100; control measures, 1101; Eastern Province,

Uganda—Erosion (*cont.*)

1099-1100; gullying, 1100; sheet, 1099; Teso district, 1100.

European settlers, occupations, 1392.

Exports: cattle, 939; coffee, 910; cotton, 904, 1327; decline in value, 1328; goats, 939; gold, 1500; groundnuts, 898; hides and skins, 940; to Japan, 1337-8; sheep, 939; tanalite, 1500; tea, 924; timber, 998-9; tin ore, 1500; tobacco, 916.

Finance, public: budget (1937), 1442; customs—basis changed, 1342;—revenue from, 1442;—union with Kenya and Tanganyika, 1344-5; debt, 1441-2; excise duties, revenue, 1442; expenditure, 1441-2;—roads, 1558; grants-in-aid, imperial, 1441; native tax revenue, 1458; revenue, main heads, 1442.

Forests: aerial survey, 1011; check list compiled, 1010; deforestation, 998, 1099, 1100; departmental policy, 998; economic exploitation, 985; Forestry Department, check list compiled, 1010; forestry service, African training, 1020; forestry staff, 998; forestry training, native, 998; investigation, 1011; native authorities' plantations, 998; products, rubber, 1016; reafforestation work, 998; savannah destruction, 998; training school, 998.

Government: administration, provincial, expenditure on, 1442; Agreement—with Buganda kingdom, 444-5;—with Bunyoro (1933), 448;—with Mugabe of Ankole, 448;—with Mukama of Toro, 448; Closer Union question, 182-5; East African federation proposed, 181-2; executive council in, 163; legislative council, 163;—Indian representation, 343; native policy discussed, 451-2; system—under Agreement (1900) with Buganda, 444;—under Kabaka of Buganda, 444.

Governor: land tenure policy, 852; powers in Buganda kingdom, 445.

HEALTH AND MEDICINE:

British Empire Leprosy Relief Association, workers maintained, 1141.

disease: leprosy, extent of, 1142; plague, rise in incidence, 1135; relapsing fever contracted in prisons, 1136; trypanosomiasis—control by

Uganda—Health and Medicine (*cont.*)

evacuation of population, 1131;—epidemic, 1119-20, 1129-30;—protection, intravenous injection, 1133; typhus—louse, prevalence, 1137;—tick, occurrence, 1138; venereal—cases treated, government institutions, 1145;—prevalence, 1144;—syphilis, incidence, 1120; yellow fever, endemic area, 1128.

dispensaries, rural, system, 1167.

health services: Buganda grant to, 447; expenditure on, 1167, 1442; history of development, 1120; native subordinate staff, training, 1190; native training, 1166, 1183;—as medical assistants, 1184-5; organization, and staff, 1166-7.

hospitals: accommodation and patients, 1166, 1167; Mengo, native medical training started at, 1185.

leper colonies, 1142-3.

medical missions: leper colonies, 1142; Mengo hospital, diseases prevalent, 1144; work, 1118-19.

native medical assistants, qualifications and registration, 1185.

research: 1166; Human Trypanosomiasis Institute, Entebbe, 1127; institutions, 1161; trypanosomiasis, 1616, 1617;—Royal Society's Commission, 1623; venereal disease, yaws, 1619; yellow fever, 1127, 1616; Yellow Fever Institute, 1161.

sanitary control, sleeping sickness medical passports, 1200.

survey, leprosy, 1142.

training, native, Mulago Medical School, 1166.

Import duties: basis changed, 1342;—customs union with Kenya and Tanganyika, 1344-5;—revenue, 1442; cotton piece goods, sources, variations in, 1336; government, 1339-40; Japan—percentage, 1337;—products, 1336-7; proportion—of British African, 1335;—of different, 1335; timber, 999; value per head of population, 1334.

Indians in, 342-4.

Infant mortality, Northern Province, 128.

Judicial system: Buganda courts—appeal from, 444;—composition and competence, 447-8; High Court—

Uganda—Judicial system (*cont.*)
 court of appeal, 448;—established (1902), 444; native courts, composition and competence, 450; organization under Kabaka, 444.
 Kigezi District, typhus (louse) outbreak, 1137.
 Labour, native:
 communal road-making, 612; compulsory—agricultural production, powers, 631;—regulations, 614–15, 619; customary, road-making, 1557; employees, numbers, 607; luwalo—commutation, 619;—extension of system, 612;—regulations governing, 575–6, 619; migration, 702;—from Belgian Congo, 647; offences—penalties, 660;—statistics, 662.
 prison, recommendations of Commission of Inquiry, 312.
 private employment, recruitment rules, 656.
 tax payment by, 620.
 wage determination, provision for, 695.
 Lake Edward, recession, 1061, 1100.
 Lake George, recession, 1061, 1100.
 Lake Kioga, recession, 1061, 1100.
 LAND:
 acquisition, early regulation, 759.
 alienation: area affected, 762; control in native kingdoms, 760–1; state, terms, 825.
 concessions, Kabaka's grant, 759.
 Crown: Crown Lands Declaration (1922), 762; definition (1902), 761; native rights, 761.
 government control, 759–60.
 Indian estates, 342.
 Mailo lands: mineral rights, 1519; subject to Lukiko, 445.
 mineral rights, 1519.
 native: area, 761–2; mineral prospecting, regulations, 1521; occupation tribute (busulu), 575; rent in Buganda, 575; tax in Buganda, 575; tenure, 762–3;—Crown Lands Ordinance (1903), freeholds granted, 852;—inquiry into customs by Sir W. M. Carter, 839;—kibanja system, Bunyoro, committee's report, 839;—legislative difficulties, 852–3;—peasant cultivator rights, inquiries, 852;—systems of, in N. Uganda, 831;—title registration, 763.

Uganda—Land (*cont.*)
 Uganda Agreement (1900), 760.
 Lango District, leprosy, extent, 1142.
 Language in: 88; Interterritorial Language Committee, 90.
 Law, native customary, recognition, 444.
 Legislation: Kabaka and Lukiku, right of, 444; native co-operation, 1473; Sleeping Sickness Ordinance and Rules, 1132; system under Kabaka of Buganda, 444; venereal disease, compulsory hospital attendance, 1144.
 Makerere College, *see under* British East Africa, education, native.
 Meteorological service in, 15.
 Minerals: copper deposits, 1500; gold production, 1500; production, 1392; prospecting, native lands, 1521; rights, ownership, 1519; salt, production, 1500; tanalite, production, 1500; tin ore production, 1500.
 Mines: regulations, 1526; taxation, royalty system, 1530, 1531.
 Missions: Church Missionary Society, medical work, 1119, 1167, 1184–5; educational work, 1233, 1243–4, 1251; Franciscans, medical work, 1119; native medical training, 1184–5; 1190; White Fathers, medical work, 1119; White Sisters, medical work, 1118–19.
 Mulago School, *see under* British East Africa, education, native.
 NATIVE ADMINISTRATION:
 Ankole: judicial system, 449; Lukiko's powers, 448; revenue and expenditure, 449.
 Buganda: administrative divisions, 445; chiefs—powers, 445–6;—salaries, 446; judicial system, 447–8; Kabaka's powers, 445; Lukiko—constitution, 445;—legislative powers, 444; native courts, appeal rights, 444; organization under Agreements, 444–5; revenue and expenditure, 446–7.
 Bunyoro: judicial system, 449; Lukiko's powers, 448; revenue and expenditure, 449.
 chiefs, appointment and powers, 150.
 council system, 449–50.
 expenditure on, 1442.
 medical services, leper colony, 1142.
 native authorities: early development

Uganda—Native Administration (*cont.*)
 in, 443; forestry work, 998; road maintenance and construction, 1558; tax duties, 575.
 native courts, *see under* Uganda, judicial system.
 native treasuries: health expenditure, 1167; revenue, 575.
 Nigerian influence, 138.
 organization outside 'native governments', 449-50.
 present policy surveyed, 451-2.
 prisons, 311.
 revenue from luwalo commutation, 576.
 stock farms maintained by, 950.
 Toro: judicial system, 449; Lukiko's powers, 448.
 Political organization before Agreement (1900), 444.
 Population: Asiatic community, 342; density, 2; increase, 1100; native, occupational, 1393; non-native—census, 117;—classification, 117.
 Postal service, joint service with Kenya, 184.
 Prisons, Ankole District, relapsing fever contracted in, 1136.
 Railways: development, reasons, 1604; financial position, 1605; incorporation with Kenya, system, 1582-4 (*see also under* Kenya, railways); Indian labour on Uganda Railways, 613; policy, use for Kenya interests, 1608; Uganda Line, anti-slavery campaign and construction, 1538.
 Roads: administration, 1557; construction cost, 1558; luwalo labour on construction, 612; maintenance cost, 1558; mileage, 1557-8; native customary labour, 1557; surface used, 1557.
 Survey: air, of eroded areas, 1101; detailed, 8; employment of Africans in, 9.
 Swahili in, 88.
 TAXATION:
 cotton export duty, 905.
 mining, royalty system, 1531.
 native direct: assessment system contrasted with other African, 596; defaulters, payment by labour, 620; education rate, areas applied, 576, 1240; hut tax, 575; land occupation tribute (busulu), 575; land tax in

Uganda—Taxation (*cont.*)

Buganda, 575; luwalo—commutation, 445, 576, 619;—labour dues, regulations governing, 575-6; migrant labour investigation, 600-1; native authorities and collection, 599; payment by unpaid labour, 620; poll tax—collection and allocation, 575;—exemption, 575;—revenue, 1442;—substituted for hut tax, 575; rent in Buganda, 575; revenue from, 1458.
 non-native direct; poll tax, 550;—rates, 552;—revenue, 1442.
 Teso, people of, 29.
 Trade: balance, consideration of with Kenya, 1350; cotton, Indian share, 342; native—control, 1424;—marketing control, Indian opposition, 343; Trading Centres Ordinance, 1424; with non-British territories, Congo zone, *see also under* Uganda, economic system.
 Transport: air—development, 1600;—expenditure, 1601;—subsidy, Imperial Airways, 1601; water, Lakes Kioga and Kwania, 1542.
 Tsetse fly control measures, 1131.
 Vital statistics system, 117.
 Water supply: boreholes, 1046; deficiency in Eastern Province, 1100; hydrographic survey recommended, 1046; lakes recession, 1062, 1100; rainfall and, 1046; silting-up problem, 1045; storage question, 1046; survey made, 1045.
 Witchcraft and magic, law on, 296.

Uganda, Native Governments.

ANKOLE: land policy, 760-1; land tenure, native, and Mailo system, 852; native administration in, 448-9.
 BUGANDA KINGDOM: 444; administrative divisions under Saza, Gombolola, and Muruka chiefs, 445; agreements defining relations with Protectorate Government, 444-5; chiefs—powers, 445-6;—salaries, 446; erosion, 1100; government departments, Lukiko Treasury, 446; judicial system—Lukiko Court, composition and jurisdiction, 447;—subordinate courts, composition and competence, 447-8; Kabaka—native ruler, 444;—powers, 24, 445; labour, communal, chiefs

Uganda, Native Governments—Buganda Kingdom (*cont.*)

rights, 611-12; Lacustrine kingdom, 23-4; land—Agreement (1900), terms, 760;—alienation to non-natives by private purchase, control, 827;—laws, on alienation, 827;—rent payment, 575; rights granted to king contrary to native custom, 837;—tax, 575; Lukiko—appellate powers, 306;—court, jurisdiction and constitution, 445;—law for compulsory treatment of venereal disease passed by, 1144;—native parliament, 444; luwalo obligation, 575-6; Mailo lands—definition and area, 760-1;—grant of proprietary rights, question of title, 851-2;—mineral prospecting, 1521;—tenure, 762-3; native courts, appeals from, 288; native treasury, revenue, 575; political organization, authority of Kabaka, 24, 445; revenue and expenditure, 446-7; roads, luwalo labour on, 611-12; treaty rights in, 833; venereal disease, compulsory treatment enforced, 1144.

BUNYORO: education rate, 576, 1240; land tenure—Kibanja, report by committee, 839;—native and Mailo system, 852;—titles, 848; native administration in, 448-9; sisal production, 926; taxation, education rate, 1240.

TORO: education rate, 576, 1240; land policy, 760-1; land tenure—certificates of occupancy, 852-3;—Mailo system, 852; native administration in, 448-9; taxation, education rate, 1240.

See also under British East Africa.

Ukerewe Island, land tenure, native customs studied, 838.

Unatra, see under Belgian Congo, industrial concerns.

Union Minière du Haut Katanga, see under Belgian Congo, industrial concerns.

Union of S. Africa.

African languages, research, 73.

African Studies, Inter-University Committee for, 53.

Afrikaans language, 75.

Afrikaans-speaking population, university provision for, 1212; *see also* Union of S. Africa, education (European).

Union of S. Africa (*cont.*)

AGRICULTURE:

arable land, abandonment from erosion, 1082; area of, 1027.

Asiatic employees, 1363.

Boards: Dairy Industry Control, 941, 1368;—Bechuanaland creameries controlled by, 924; Eggs Advisory, 1368; Hides and Skins Advisory, 1368; Livestock Control, 1368; Maize Control, 920, 1368; Tobacco Control, 1368; Wheat Control, 1368; Wool Advisory, 1368.

coloured employees, 1363.

co-operation, *see* Union of S. Africa, co-operation.

crops: cotton, European production, 922; fruit, citrus and deciduous, European production, 927-8;—Control Board, 1368;—export quota, 1368;—native production, 891-2; pulses, native cultivation, 900; sorghum, native cultivation, 893; sugar, —European production, 928-9;—Sugar Association, 946; tobacco—Control Board, 1368;—cultural processes, 925;—European production, 925; viticulture, European production, 927-8; wheat—Control Board, 1368;—European production, 921;—native cultivation, 889.

decline in industry, 1364.

division of research work by, 946.

eggs, Advisory Board, 1368.

European: co-operation, Land Bank functions, 1468; co-operative—societies, 1468;—Wine-Growers Association, 928; cotton, 922; drift to towns, 1364; Dutch and British engaged in, proportion, 1364-5; extent of, and numbers engaged, 918, 1365; fruit, 927-8; government assistance, 1366-8; Land and Agricultural Bank established, 1367; maize, 918, 920; native employees, 606, 1362;—conditions, 673, 723;—native farm labour, legislation defining, 724-5;—native 'labour tenants', 724-5;—native squatters, question, 724-5; primary industry, 1364-5; sugar, 928-9; supported by railway policy, 1607; tobacco, 925; wheat, 921.

exports, decline in value, 1364.

irrigated area, 1030.

Union of S. Africa—Agriculture (*cont.*)

irrigation for: 1026-32; costs, and effect on, 1028-9, 1031-2;—for stock raising, 1032-3.

labour shortage, 693.

livestock: cattle—breeding plans, 1084;—breeding work, 975;—breeds evolved, 931;—chilled meat subsidy, 937;—conditions in Union suitable for, 930;—irrigation for stock-raising, 1032-3;—meat industry, 937-8;—quarantine regulations, 936; Control Board, 1368; culling, 973; dairying—butter and cheese export bounty, 1368;—Dairy Industry Control Board, 941, 1368;—European and native production, 941-2;—milk distribution scheme, 941-2; dipping, 974; drought losses, 1032, 1080; fencing, progress in, 974; hides and skins, 939;—Advisory Board, 1368; management, kraaling as cause of erosion, 1067; numerical increase, 1081; paddocking recommendations, 1080; sheep, breeding importations, 931; slaughter stock export bounty, 1368; wool—Advisory Board, 1368;—European and native production, 941.

loan and mortgage facilities, 1367.

marketing: Act (1936), provisions, 1368; Council, functions, 1368.

native: co-operative societies, 1470-7; crops, export sales, 1408-9; education—Flagstaff School, 807;—Fort Cox School, 808, 977;—Fort Hare, 1818;—institutions for, 1222;—native councils' expenditure, 807;—native demonstrators, employment and training, 965;—recommended, Interdepartmental Committee, Native Education, 1222;—schools for native training, 965-6;—Teko School, 807;—Tsolo School, 807, 975; employees—conditions of, 673;—in European, 606, 1362;—labour tenants on farms, 724-5;—legislative definition of farm labour, 724-5; limitations, and increased labour competition, 1410; livestock marketing facilities, scope for increase, 1415-16; Native Development Account, grants for instruction, 555; production—food decrease, 886;—increase would benefit European

Union of S. Africa—Agriculture (*cont.*)

industry, 1411-12;—possibilities estimated, 1412-13; squatter question, 724-5.

official publications, 958.

organization: control and advisory boards, 1367-8; cotton, 922; dairy industry, control board, 941, 1368; eggs, advisory board, 1368; fruit, 927-8;—Wine and Spirit Control Act, 928; hides and skins, advisory board, 1368; livestock, control board, 1368; maize, 920;—control board, 1368; sugar, 928-9; tobacco, 925;—control board, 1368; wheat, 921;—control board, 1369; wool, advisory board, 1363.

pasture-lands: control and management, 1081; deterioration, 1080-1; grasses, improvement of, 1068.

policy: stock-farming and maize growing advocated, 920.

research: 945-7, 1622; Capetown low temperature research laboratory, 946; Division of Plant Industry, 1623; Empire Cotton Growing Corporation stations, 945; by industrial concerns, 946-7; livestock, 1622;—influence of rinderpest epidemic, 1617;—Onderstepoort veterinary laboratory, 1622; pasture, 972; Sugar Association, work, 946.

squatter question, 724-5.

subsidies and export bounties: 1367-8; butter and cheese, 941, 1368; cotton, 922; fruit, 927, 928, 1368; meat, 937, 1367-8; sugar, 928-9; transport rates, rebates, 1368; wool, 941, 1367-8.

Anthropological studies in, 53, 54, 838.

Aviation, *see under* Union of S. Africa, transport; Transport and Communications, air.

Banks, Land and Agricultural, functions, 1367, 1468.

Bantu: inhabitants of, 22; languages, 82; problem in, 346; village forms, 23.

Biological Control Laboratory, Capetown, *see under* Health and Medicine, research.

Boers: and British colonial policy, historical, 130; percentage of population, 145.

Union of S. Africa (*cont.*)

- Botha, General, favours inter-racial co-operation, 145.
- British in, percentage of population, 145.
- Broadcasting: programmes, 1297; S. African Corporation established, 1296-7; stations, 1297.
- Building, coloured employees, 1363.
- Capital, *see under* Union of S. Africa, economic system.
- Census: Director's population estimate, 106-7; proportions of British and Dutch given by, 145; provision, 110.
- Chamber of Mines, native medical education grant, 1184.
- Churches, growth of separatist, 1216.
- Cinema: censorship provisions for European, 1300; Film Advisory Board to Minister of Education, 1303; Film Division, National Bureau of Educational and Social Research, 1303; origin of films, 1300.
- CIVIL SERVICE: appointment provisions, 221-2; Attorney's office, appointments, 221; 'Bantuization' in native reserves requested, 154; disciplinary regulations, 222; divisions of, 220-1; examination entrance tests, 220; Forestry Division staff, 989; Governor-General's powers over appointments, 221-2; legislative provisions regarding, 219, 222; Native Affairs Department, training, 222; no preference for Bantu studies qualifications, 1211; political influence on appointments, 222; Public Service Commission, composition and powers, 221-2.
- Climate, 13.
- CONSTITUTION: British Commonwealth, relations defined, 146; central government, over-riding powers, 148; coloured and native persons excluded from Parliament, 151; Dominion status, 144; federation discussed, 149;—Governor-General, powers, 148;—native affairs, 363-4;—Transkei Council, appointments, 353; High Commission Territories, transfer provisions, 174; High Commissioner, functions, 395; House of Assembly, 148-9; National Convention (1908-9), 151; Natives Representative

Union of S. Africa—Constitution (*cont.*)

- Council, functions and future, 155; neutrality question, 147; oath of allegiance question, 146; provinces, place in, 149; provincial autonomy, 147-8; Provincial Councils, composition and powers, 148; provincial executive committees, composition of, 148; Representation of Natives Act (1936), 131; secession question, 145-7; Senate—composition, 148;—native representation, 153; South Africa Act (1909)—basis of, 147;—educational system, provisions, 1209;—native administration under, 363;—railways under, 1607;—Supreme Court established, 281; Status of the Union Act (1934), 146; Union relations with Empire defined, 146; Statute of Westminster, 146; system of government, summary and conclusions, 1641.
- Co-operation: European—Agricultural Credits Act, societies registered, 1468;—agricultural societies, registration and inspection, 1468;—Commission of Inquiry, recommendations, 1468;—'compulsory', inquiry into, 1468;—Co-operative Wine Growers Association (K. W. V.), 928;—Land Bank, functions, 1468; native, 1470-1;—Commission (1933), findings, 1471;—membership not open, Co-operative Societies Act, 1468;—registration and supervision, 1470;—societies, formation urged by commission of inquiry, 1468;—urban areas, 1471.
- Customs, *see under* Union of S. Africa, import duties.
- Customs and excise revenue, 1459.
- Defence Bill introduced (1912), 147.
- Defence question, 147.
- Division of Plant Industry, Pretoria, *see under* Union of S. Africa, agriculture (research).
- Drought Investigation Commission, *see under* Union of S. Africa, water supply.
- Durban Central Co-operative Cotton Exchange, 922.
- Dutch in, percentage, 145.
- Dutch Reformed Church: education, native, participation, 1220; Potchefstroom University foundation, 1213.
- Economic development, early history, 1311-12.

Union of S. Africa (*cont.*)

ECONOMIC SYSTEM:

Capital: companies, new, investment, 1378; foreign investment, 1318;—amount per head, 1319;—in diamond industry, 1311;—in gold mines, 1489; 'public listed', amount, 1319.

civilized labour policy, *see under* Union of S. Africa, labour; Labour, native.

cost of living, tariffs, effect on, 1374.

European: agriculture, predominant industry, 1364-5; Asiatic employees, 1362-3; Asiatics engaged in, increase, 1363; characteristics, 1361; coloured employees, 1363; coloured persons engaged in, increase, 1363; drift to towns, 1364; Europeans engaged in, increase, 1363; functions of Europeans; 1375; gold standard abandoned, influence on, 1366; labour policy, 1369-70 (*see also* Union of S. Africa, labour, native, and non-native); mines, undue influence, 1365-6; native employees, increase and numbers, 1362-3; planned development, 1366; racial groups in, proportions, 1363; summary and conclusions, 1657-8; urban native and Asiatic population increase, 1363; wage rates maintenance and effect on, 1371-2.

gold, inverse activity, part played by, 1410.

income, calculation of rate per head, 1371.

industrial expansion policy, 1375-7.

industries, secondary, development, 1378; *see also under* Union of S. Africa, trade and industries.

native: agricultural production increased, benefits to European industry from, 1411-12; demand for general merchandise, 1411; division of labour, beginnings, 1414-15; European influence, disruptive consequences, 1413-14; evolution under European influence, 1408; exchange facilities lacking, 1415; family budgets—earnings and expenditure, 1412-13;—Native Economic Commission analysis, 1412-13; foodstuff consumption, excess over production, 1411; future of—native Eco-

Union of S. Africa—Economic System (*cont.*)

conomic Commission's views, 1407;—problems discussed, 1405-7; imports purchased by labour, 1409; marketing facilities, scope for increase, 1415-16; reserves, labour sale, importance illustrated from Basutoland, 1409; rise in standard of living, improved agricultural technique, possibilities, 1412;—division of labour, possibilities through, 1413-14; subsistence to money, transition, 1407-8; summary and conclusions, 1658-9; units, 1361.

relations between sections, 1361.

tariffs: Customs Tariff Commission, recommendations, 1376-7; Customs union with S. Rhodesia and High Commission Territories, 1569; railway development influenced by, 1566-7.

EDUCATION:

Asiatic: provision for, 330-1, 1213.

coloured: state subsidy, basis, 1213.

European: 1209-13; Afrikaans-speaking pupils, percentage, 1212; compared with native, 1215-16; compulsory age limits, 1210; expenditure compared with native, 1214-15; finance, 1210; higher—financial assistance to universities, forms, 1218;—language medium, provision for Afrikaans, 1212;—Union responsibility, 1209; industrial and vocational, position in system, 1209-10; language medium, legal provisions, 1212; library provision, 1292-3; National Union of South African Students, Bantu Study Circles formed, 1211; organization, 1209-10;—financial separated from administrative responsibility, 1210;—local bodies, position, 1210; primary, 1209; Provincial Finance Commission inquiry (1934), 1209; provincial responsibility, 1209; provincial subsidies, 1209-10; universities—Bantu Studies, no government contribution for, 1211;—colour bar, no legal, 1211;—influence of, 1210-11;—influence, Anglo-Boer relations, 1211;—institutions, 1210-12;—interest in native affairs fostered, 1211.

native: adult, omitted from Inter-

Union of S. Africa—Education (*cont.*)
 departmental Committee Report, 1222; agriculture—demonstrators trained, 1222;—Fort Cox, 1222;—Fort Hare, 1218;—institutions for, 1222;—Interdepartmental Committee's recommendations, 965, 1222;—schools, 807, 808, 965-6; allocation of funds, system, 1213; compared with European, 1215-16; content, 1218-23;—Native Economic Commission (1930-2), recommendations, 1220-1; control, 1213-17;—by state, extent, 1216;—Union Department of Native Education, proposed, 1217; expenditure—compared with British dependencies, 1214-15;—compared with European, 1214-15; fees, school, rates, 1287; female—child welfare teachers, recommendation, Interdepartmental Committee, 1222;—Jeanes system recommended, 1222; finance—and control, 1213-17;—Financial Relations Fourth Extension Act (1922), provisions, 1213;—grants-in-aid, basis, 1215;—Native Development Account, 555, 1213-14;—Native Education Fund, 84;—Native Education Fund proposed, 1217;—Native Taxation and Development Act, provisions, 1213-14;—proportionate contribution raised, 1214;—subsidies, *see under* Union of S. Africa, education (native, subsidies);—system, debt charges, 1214;—system, opinion of Native Economic Commission, 1214; government schools, 1215; Higher Education Act, Fort Hare incorporated, 1218; higher—entry to Universities, 1217;—financial assistance, basis, 1218;—Fort Hare, South African Native College, 1217-18;—Fort Hare, agricultural training, 1218;—Fort Hare, Bantu studies, 1218;—Fort Hare, fees, 1287;—Fort Hare, religious character of, 1218;—graduates, numbers, 1218; Interdepartmental Committee—composition, 1220-1;—financial reform proposed, 1217;—intelligence tests used, 39-40;—local committees recommended, 1217;—policy reviewed, 1281;—proposals for extending, 1221-2;

Union of S. Africa—Education (*cont.*)
 Union control proposals, 1217;—vernacular literature, 84; language medium—Afrikaans and English, 1223;—vernacular prescribed, 1223; liability for expansion on native population, 1213; local committees obligatory, government schools, 1217; medical—subordinate staff, 1187;—training, committee's recommendations, 1183-4;—training at South African Native College, 1183-4; mission, 1213;—language, objections to vernacular, 1223;—local committees, use of, 1217;—position of, 1218;—schools, grants-in-aid, 1215; Native Development Account, *see under* Union of S. Africa, education (native, finance); Native Education Fund, *see under* Union of S. Africa, education (native, finance); Native Taxation and Development Act, *see under* Union of S. Africa, education (native, finance); parents associated with, extent, 1216-17; percentage of population receiving, 1215; policy—control, 369;—inquiries into, 1220-2; primary, fees for, 1215; provincial—control, 1213;—expenditure, legal provisions, 1213; pupils, numbers and grades, 1215; revenue, amount, 1214; school medical officers, health propaganda, 1147; Social Anthropology and Native Law Department at South African Native College, Fort Hare, 53; state-aided schools, numbers, 1215; subsidy—from native taxation revenues, basis and extent, 1213-14;—from Union funds, amount, 1213-14; summary and conclusions, 1655; teachers' salaries, payment, 1215; theories, controversy over, 1219-20; universities, entrance, 1211-12; urban native, facilities for, 505.
 Elsenburg College of Agriculture, amalgamation, 945.
 EROSION: annual soil losses, 1059; arable land and, 1082; causes, 1079; control—measures, 1082-3;—recommendations, 1080; dam provision as preventive measure, 1034; donga and sluit formation, and control, 1082; gullying, 1058, 1081; inquiries into, 1079-80; native reserves, extent and

Union of S. Africa—Erosion (*cont.*)

control, 807, 1083-4; progressive development, 1079-80; wind, increase, and control measures, 1082.

EXPORT BOUNTIES, QUOTAS, AND SUBSIDIES

butter and cheese, 941, 1368; cotton, 922; fruit, 927, 928, 1368; hides and skins, 939; maize, 920, 1368; meat, 937, 1367-8; slaughter stock, 1368; Subsidies Act (1931), 1367; sugar, 928-9; wool, 941, 1367-8; *see also* under Union of S. Africa, agriculture.

EXPORTS: agricultural, decline in value,

1364; butter, 941; cheese, 941; destination, 1329; fruit, 927;—citrus, 927;—deciduous, 927-8;—dried, 927; gold, 1327; hides and skins, 939; import tariffs, effect on, 1373-4; maize, 920; meat, 937; Subsidies Act (1931), 1367; sugar, 929; wheat, 921; wool, 941;—to Japan, 1338.

FINANCE, PUBLIC: customs and excise

revenue, 1459; debt—external, amount, and interest rate, 1323-4;—increase, 1434; exchange, dumping protection, 1373; expenditure—Forestry Division, 989;—railways, 1571;—roads, 1551; Financial Relations Fourth Extension Act (1922), provisions, native taxation and education, 1213; loans, 1320; mining revenue, 1461; native contributions and benefits, investigation, 1457; railways, 1570; tax revenue, 1434.

FORESTS: afforestation—annual planting,

989;—early history, 987-8;—plantations, 988; area, 987; botanical study, Division of Plant Industry, 1010; control under Forest Act, 988; Crown lands reserved for, 988; exotic tree planting, 1012; Forestry Division, expenditure, organization and staff, 988-9; native areas and, 989; pests and diseases—research work, 1017;—specialist staff for, 1017; policy, 988-9;—summary and conclusions, 1652; reclamation of land, 988; research, 989-90;—Forest Products Research Institute, 989;—Knysna Station, 989;—organization, 1009; Research Section, work of, 1010; species, identification, 1010; state nurseries, 988; training, Paradys Forest School, 989; watershed pro-

Union of S. Africa—Forests (*cont.*)

tection; 989, wattle plantations, 989.

Fort Hare Native College, 1218; *see also* under Union of S. Africa, education (native, higher).

FRANCHISE: Asiatic in Cape Province,

154; coloured—Bill introduced (1926), 154;—Cape Province, 154; European, extended, 152; history of, 150, 155; Indian question, 328; native—'Cape franchise', entrenched, 151;—'Cape franchise', retained, 153-4;—Glen Grey Act, 150;—influence on formation of Union, 150-1;—Native Affairs Commission (1903), 151;—native constituencies proposed, 151;—present position, 152-3;—restriction in Cape, 370;—segregation policy and question of, 152;—summary and conclusions, 1640;—in Transkei under Act of 1887, 351; 'poor whites' and question of, 151; proportional representation, provincial elections, 148; question, 150.

Geology Dept., surveys for water boring, 1033.

Germiston, alcohol factory, 920.

Glen Grey district, land tenure and density of population, 844-5.

Great Trek, 130, 1310.

HEALTH AND MEDICINE:

Asiatic hospital and welfare provision, 333.

child welfare, native women as teachers, recommendation, 1222.

conferences: Pan-African (1935), 1153; Representatives of Health Services (international), 1153; silicosis (1930) (international), 1150; yellow fever and aviation discussed, 1128.

disease: helminthic infestation, incidence, 1147; leprosy—numbers treated in institutions, 1142;—prevention by improved living conditions, 1141; malaria incidence, 1124; measles epidemics, 1151; plague, rodent carriers, 1134; silicosis—commissions, 1149;—compensation paid for, 674, 1149;—control measures taken, 1149;—incidence amongst native and European miners, 1148-9; tuberculosis—increase in native population, 1123;—silicosis complication, 1149; typhus

Union of S. Africa—Health and Medicine (*cont.*)

- case mortality rate, 1137;—endemic area, 1137;—incidence of different types, 1137; yellow fever, infection precautions, 1128.
- doctors, native, training, 1218.
- health insurance, committee's recommendations, 1155.
- health services: district surgeons, 1154; education and treatment campaigns, helminthic infestation, 1147; facilities provided, 1155; Inquiry Committee recommendations, 1155; natives, urban areas, 505-6; native training—as medical aids, 1183, 1184;—as subordinate staff, 1187; organization, summary and conclusions, 1654; provision for natives, 1155.
- hospitals: 1116; leprosy institutions, 1141-2; organization and finance, 1154.
- Miners' Phthisis Board, functions, 1149.
- Miners' Phthisis Compensation Fund, revenue and expenditure, 1149.
- Miners' Phthisis Medical Bureau, functions, 1149.
- missionary work, 1116.
- mosquito control, 1126.
- Public Health Ministry, organization, 1154.
- research: Biological Control Laboratory, Capetown, 1153, 1616; Field Station, Eshowe, 1155; plague, inoculation, 1136; Research Grant Board, 1155-6; silicosis, 1148-9; South African Association of Private Laboratories, 1156; South African Institute for Medical Research, work and finance, 1136, 1155, 1624; Witwatersrand University Medical School, 1155.
- vital statistics, registration urged, 111.
- HIGH COMMISSION TERRITORIES and: 174; segregation policy as obstacle to transfer, 176; Standing Joint Advisory Committee set up to investigate transfer, 175; Status of the Union Act as affecting question of transfer, 175; transfer to Union, question, 173-7; Union Government to set out terms of transfer, 176.
- Housing: Asiatic housing question,

Union of S. Africa—Housing (*cont.*)

- 331-2; urban areas—conditions, 507-8;—provision, 503-5;—recreation facilities, 505.
- Immigrants Regulations Amendment Act (1937), tropical labour legalized by, 652.
- Immigration of settlers, extent of, 816.
- Imperial Conference (1926), 145.
- Import duties: customs—agreement with S. Rhodesia terminating, 1344;—influence on railway development, 1566-7; Customs Tariff Commission (1934), examination of results, 1373; protective tariffs—sugar, 929;—tobacco, 925;—wheat, 921; revenue, 1459; specific trade agreements, 1343; system, 1343-4; tariff (1925), objects, 1372-3; wage maintenance and demand for, 1372.
- Imports: from Great Britain, proportion, 1335; from Japan, 1338; percentage of British African, 1334; proportions of different, 1334; tobacco from N. Rhodesia, 925; value per head of population, 1334; wage rates, effect on, 1372.
- Indian problem in: 318-34; summary and conclusions, 1644-5; *see also* under Indians in South Africa.
- Infant mortality, 111, 128.
- Inter-University Committee for African Studies, 81.
- Johannesburg: international silicosis conference held (1930), 1150; Native Township Co-operative Society, 1471; Pan-African Health Conference (1935), 1136.
- JUDICIAL SYSTEM: adjustment to partially Europeanized native population, difficulties, 283; administration, 281-4;—of criminal law to natives, difficulties encountered, 281-2; chiefs' powers, 263, 284; judiciary, organization and character, 281; juries, supersession of, when permitted, 281-2; juvenile offenders, 313; magistrates—controversy over their position, 300;—difficulties encountered in native trials, 282; native courts—appeals, competence and functions, 282-3;—extension of criminal jurisdiction recommended by Native Economic Commission, 284;—High Court of Natal, functions, 281, 359;—position

Union of S. Africa—Judicial System
(*cont.*)

of, 283-4;—recommendations of Native Economic Commission, 284; native offenders, proportion of, 282; native position in relation to, 281-3, 348; natives in civil suits, procedure, 282-3; Orange Free State, 363; penalties, corporal punishment, Masters and Servants Laws, 661; prison labour, employment, 311; Supreme Court established, 281; Supreme High Court, functions and composition, 359; Transvaal, 361-2; urban natives subject to European code, 509.

LABOUR:

Asiatic: Chinese—imported, 638;—on Rand, 603; civilized labour policy and Indians, 326; indentured Indians in Natal, 603; Trade Unions and, 326.

civilized labour policy: influence, 369; meaning and implications, 682-9; railways, 1607.

colour-bar policy, legislation implementing, 688.

coloured, female, employment, 1363.

disablement compensation, 674.

domestic service: coloured girls' employment, 1363.

European: employment, government's attitude, 685-6; native competition, reasons for increased, 1409; Social Welfare Commissioner, 672.

historical background, introduction of slavery, 637.

mines: Miners' Phthisis Board, 1149; Miners' Phthisis Compensation Fund, 1149; Miners' Phthisis Medical Bureau, 1149; silicosis—compensation, 674, 1149;—incidence, 1148-9;—preventive measures, 1149; silicosis and tuberculosis, prevalence rates, 1150.

offences, statistics, 662.

personal service: Asiatic employment, 1363; coloured employees, 1363.

poor white problem, 684-6, 1377; *see also under* Union of S. Africa, Poor Whites.

ratio of native and European employment under Tariff Act provisions, 686.

wages, comparative rates, 683-4.

Union of S. Africa (*cont.*)

LABOUR, NATIVE:

agricultural: farm conditions, 673; farm tenants—penal provisions applicable, 725;—restriction on members, 724-5; quality of labour, 695.

apprenticeship system operating against, 689.

civilized labour policy applied to, 682-9.

colour bar policy applied to, 688-9.

communal labour, customary control, 616.

competition with white: increased by agricultural restrictions, 1411; increasing, 1409; problem, 1372, 1375, 1377-9.

compulsory, 616.

contract: curfew rules in Natal, 667; hereditary nature, 663; travelling expenses—attitude of employers, 657;—borne by employee, 657.

control of, 369.

Director of Native Labour, duties, 673. displacement by white unskilled labour, 1372.

employees, numbers, 606, 1362.

female industrial employees, 1362.

Glen Grey Act, policy, 638.

governmental limitation, 685-6.

Hottentots as supply, 346.

importation of tropical legalized (1937), 652.

industrial disputes, legislation, 689.

industrial employment policy contrasted with Belgian Congo, 1274.

Masters and Servants laws: corporal punishment for breach, 661; early use, 637.

migration: disease, infection spread, 1149-50; effect and extent of, 700; governmental attitude, 706-7; immigrants, numbers, 700.

mines: migration, tuberculosis spread by, 1149-50;—silicosis compensation, 674;—incidence, 1148-9; silicosis and tuberculosis, prevalence rates, 1149; tuberculosis, 1139.

Natal, early policy, 356-7.

Native Regulation Act (1911), provisions, 649.

nutritional defects, Native Labour Commission, evidence, 1123.

offences: legislation, character and

Union of S. Africa—Labour, Native
(*cont.*)

- operation, 663-4; Native Labour Regulations, penalties for breach, 660.
- Pass Laws: 664-8; committees of inquiry, 668; industrial disputes and, 689; Native Economic Commission, criticisms, 668.
- prison, employment of, 616.
- private employment: agencies for recruitment of, 651-2; historical background, 636-9; immigrants from S. Rhodesia, 654; recruitment—by European traders, abuses, 655;—*per capita* costs, 655;—rules, 656.
- recruitment: control by Native Affairs Department, 369; conventions with Portuguese Government, 652-3; external, history of, 638-9; Low Grade Ore Commission (1931), suggestions, 652; Portuguese colonies as source, 638-9; present position, 639.
- restriction policy for white labour benefit, 1375.
- sale of, effect on native economy, 1409.
- segregation, economic, of natives, 131.
- supply: question, 693;—and crowded reserves, 1409.
- union organization, obstacles, 663, 689.
- unskilled labour, 347, 683-4.
- urbanization, attempts to prevent, 1407-8.
- wages: considerations governing, 688; increase, benefits accruing, 1378; rates, 683-4, 687-8.
- welfare regulations, 673.
- LABOUR, NON-NATIVE: Factory Acts, provisions, 672-3; female, regulations, 673; hours of work regulations, 673; industrial disputes, legislation, 689; juvenile, regulations, 673; native competition—problem, 1372, 1375;—protection policy, 1378-9;—remedies, 1377-8; provision of new opportunities, 1375-6; skilled—disproportionate wages, 1370-1; tariffs for protection of, 1372; unemployment—Economic and Wage Commission's review of, 1369;—government measures, 1368-9;—maintenance of standard for white unskilled, 1369-70;—reservation of work for white unskilled, policy reviewed, 1369-70;—tariffs, effect on, 1374;

Union of S. Africa—Labour, non-native
(*cont.*)

- unskilled, cost, 1370; wages—civilized labour policy and influence on, 686;—imports and employment affected by, 1372;—Industrial Conciliation Act (1924), 686;—machinery for determining, 686;—real, comparative study, 1370-1;—skilled, 1371, 1375;—skilled and unskilled, ratio, 1370;—spread, 1370;—tariffs, effect on, 1374;—Union Wage Board, 1371; welfare, Departments of Labour and Social Welfare, functions, 672-3.

LAND:

- alienated, re-purchase by state for white settlement, 816-17.
- alienation in native reserves, regulations governing, 824.
- Asiatic ownership and occupation regulations, 330.
- Central Land Board, functions, 722.
- Crown, forest areas, 988.
- European settlement: 814-18; closer settlement policy inaugurated by Land Settlement Act (1912), 816; Settlers' Relief Committee, analysis of expenditure, 817; state expenditure on, extent of, 817.
- expropriation: for forestry, 988; under irrigation schemes, 1029.
- Glenelg policy in Cape Colony, 718.
- government policy and supply of farm labour, 695.
- Land Act (1913) provisions, 721-2.
- mineral rights, policy and control, 1519.
- Natal Native Trust (1864), 719.
- native areas: acquisition and administration, 722; acreage allocated, 723; Beaumont Commission and delimitation, 722; delimitation under Land Act (1913), 722; Native Land and Trust Act (1936), provisions, 722; purchase, 723; occupation and allocation, 723-4; occupation conditions, 723; trust land, resumption, 722.
- native holdings, 723.
- native labour tenants: definition, 724-5; delimitation of numbers, 725; Masters and Servants laws applicable, 725.
- native locations, in Transvaal, 720.
- native, mineral prospecting regulations, 1521-2.
- native occupation restrictions, 724-5.

Union of S. Africa—Land (*cont.*)

native purchase, 721.

native reserves: agriculture—production insufficient for population, 1410;—restricted by overcrowding, 1408; area—in Union, 721;—insufficient, 807; in Ciskei, 719; congestion of population, 806; constitution of, 721; Crown land, 721; deterioration, 806; development—expenditure required, 807;—Union government expenditure and policy, 807–8; Economic Commission's investigation, 806; erosion, 807, 1083–4; forests in, control, 989; improvement, Native Economic Commission and, 1412; legal ownership of, 823; Natal, 719; Orange Free State, 720; segregation policy and provision of, 805; standard of living, need to raise, 1412; survey announced, 808; tenure in, 721; Zululand, 720.

native rights: expropriation—in British Kaffraria, 719;—in Cape Colony, 719; government policy in Cape Colony, 718–19; policy—in Orange Free State, 720;—in Transkei, 719;—in Transvaal before Union, 720;—in Zululand, 719–20.

native tenure: acreage held in individual title, 846; acquisition by purchase from Europeans, 845–6; alienation under free disposal, 845;—developments of, 842–6; customary—governmental policy, 867;—inquiries into, 838;—modifications in reserves outside Cape Province, 842;—in reserves, 721; individual title—area held, 846;—survey of, 959; Native Economic Commission, recommendations, 844; 'released areas', acquisition of land in, 845–6; title, acquisition of, 721.

policy, 718.

released areas: 723; control of, 369.

segregation policy applied to, 721–2.

South African Native Trust, functions, 722.

squatters: definition and registration, 724–5; legislative restrictions, 724; licence fee payable, 725.

urban areas (native), 500, 502.

value, irrigated and irrigable, 1031–2.

Zululand Lands Commission, 719–20.

Zululand Native Trust, 720.

Union of S. Africa (*cont.*)

Language: Bantu, research in, 81; Central Orthography Committee, 81; European, two official recognized, 1212; institutions, 71; Inter-University Committee for African Studies—linguistic study, 73;—vernacular policy, 81; literature committee of South African Christian Council, 84; native, number, 81–2; School of African Life and Languages, government grants, 53–4; Tswana Language Board, 83; vernaculars, study of, 81–

4.

LAW:

character of, 267–9.

differential, 267, 269, 348, 366–9, 371.

historical development, 267.

legal position of natives, inquiries into, 300.

native civil, administration of, 281–2.

native criminal, administration of, 282–3.

native customary: Bantu, codification, 358–9; in Ciskei, 349–50; Europeanization, 283; Grey system in Kaffraria, 349; Natal Code, 359–60; Natal exemption system, 358; position of, requires definition, 268–9; recognition—Natal and Transvaal, 361, 368;—Orange Free State, 363;—progress, 267–8.

penal system, detention camps, 310.

riparian rights, 1029.

Roman Dutch: development of, 267; imposed on Transvaal native population, 361.

sources of, 267.

Legislation: co-operation, 1468;—native, 1470–1; differential, 267, 269, 348, 366–9, 371, 663–4; executive control in regard to native affairs, 366–8; industrial, 686; liquor, native beer regulations, 506–7; mining and minerals, 1510, 1518–19, 1522; native land areas, 722; native representation, 152–3; organization, 147–8;—in Transkei, 350–1; 'pass laws', native, 348, 664–8; proclamation, use by executive for native affairs, 367–8; railways, 1570; silicosis compensation to mine employees, 1149; Subsidies Act (1931), 1367; urban native, control measures, 500–12; vital statistics, 110–11.

Union of S. Africa (*cont.*)

Libraries, 1292-3.
Liquor: alcohol factory for maize, 920;
native beer control, 506-7; Wine and
Spirit Control Act, provisions, 928.
Lobolo, provisions in Transvaal, 362.
Marketing: cotton, 922; fruit, citrus
and deciduous, 927-8; maize, control
of, 920; wheat, control measures, 921.
Meteorological service, 15.

MINERALS: base research, 1491; coal,
pit-head price, 1490; development
and transport, 1602; diamonds, 1509-
12;—discovery, 1487; future develop-
ments and resources, 1535; gold—
discovery, 1487, 1489;—exports,
1327;—producing areas, 1489;—rush
at Lydenburg, 1487; iron and steel,
government plant, 1491; Iron and
Steel Corporation, 1491; manganese,
1490; metal industry—gold refining,
1535;—pig-iron, government control,
1535-6;—smelting, 1535-6; produc-
tion, 1487; prospecting, native lands,
regulations, 1521; rights, legislation
and policy, 1518-19.

MINES:

base mineral production, 1491.
coal: early history, 1490; organization,
1490; production, 1487, 1490; trans-
port question, 1490; Transvaal Coal
Owners' Association, 1490.
colour-bar policy, 688.
copper, production, 1487.
development of resources: 1366; sum-
mary and conclusions, 1660.
diamond: Alexander Bay—production,
1510;—state diggings, 1510; alluvial
—diggings, 1509-10;—production,
1511; De Beers control, 1509; 'boom'
and depression, effect, 1511; capital
—investment, 1321;—foreign in-
vested, 1311; competitive production
elsewhere, 1511; development and
organization, 1509; Diamond Control
Act (1925), 1511; Diamond Corpora-
tion organized, 1511-12; Diamond
Trading Co., Ltd., functions, 1511-
12; discovery, 1311; government
control policy, 1510-11; Lichten-
burg fields opened, 1510; London
Diamond Buying Syndicate, 1511;
Namaqualand discoveries, 1510;
Precious Stones Act (1927), provi-
sions, 1510-11; Premier Mine, De

Union of S. Africa—Mines (*cont.*)

Beers control, 1509; price control
question, 1510; production and
value, 1487, 1512; prospecting con-
trol, 1510; purchase agreement with
other producers, 1512; selling con-
trol, 1511-12; state ownership, 1515.
economic dependence on, investiga-
tions, 1365.

European employment, 1365.

gold: capital—investment, 1321-2,
1489;—yield, 1489; Chinese labour
in, 638; depreciation of currency and
production, 1532-3; dividends paid,
1323, 1489; effect on land settlement
policy, 815; exploitation, difficulties,
1488; gold standard abandoned,
influence on, 1366; labour recruited
in Portuguese colonies, 638; Low
Grade Ore Commission, recom-
mendations, 1532; operation costs,
1488-9; producing areas, 1489; pro-
duction, 1487, 1489;—estimates,
1532; Rand mines started, 1312;
'rationalization' and group control,
1488-9; Sheba Mine opened, 1487;
special tax, 546, 548; taxation—Act
(1936), rates under, 1536;—Excess
Profits Duty Act (1933), 1533;—
Gold Profits Surtax Act (1935), 1533;
—profits, system under Income Tax
Act (1925), 1532; Witwatersrand,
geological formation, 1487-8.

health organization, 1154.

importance in European economy,
1657-8.

labour: compensation for silicosis, 1149;
foreign native employees, 1362; na-
tive—conditions of work, 673;—em-
ployees, increase, 1362;—immigrant
labour in, 700;—mortality rate, 673;
silicosis incidence, 1148-9;—silicosis
prevalence rates, 1149-50;—silicosis
prevention measures, 1149;—tuber-
culosis, 1139;—tuberculosis, preva-
lence rates, 1149; non-native, silicosis
and tuberculosis prevalence rates,
1149-50; non-European employees,
numbers, 606; recruitment, 693.

Leases Board, functions, 1523-4.

leases granted, numbers, 1523.

legislation regulating, 1523-4.

Low Grade Ore Commission: findings,
1365; labour recruitment recom-
mendations, 652.

Union of S. Africa—Mines (*cont.*)

manganese production, 1490.

Miners' Phthisis Board, functions and finance, 1149.

Miners' Phthisis Compensation Fund, revenue and expenditure, 1149.

Miners' Phthisis Medical Bureau, functions, 1149.

Rand labour: origin of, 652; recruitment, 651-2; short-term employment, 497.

regulation, 1522-4.

resources, exhaustion, 1365-6.

revenue from, 1461.

Small Mines Research Committee, 1491.

state, 1515-16.

wages: European, 683, 1374; native, 683-4.

Witwatersrand commenced, 1487.

Missions: American Mission Board, medical work, 1116; Lovedale Missionary Institution, medical work, 1116; native attitude towards, 1216; official attitude and, 1216; policy of, divergence from government, 1218; Society for the Propagation of the Gospel, medical work, 1116.

National Convention (1908-9) and question of incorporation of High Commission Territories, 173-4.

National Union of South African Students, Bantu Study Circles formed, 1211.

NATIVE ADMINISTRATION:

administrative reform recommendations, Natal, 360.

agriculture restricted by overcrowding in reserves, 1408.

Bunga, *see* Union of S. Africa, native administration (councils).

chiefs: administrator as supreme, in Transvaal, 361; functions under present system, 371-2; judicial powers, Orange Free State, 263, 284; powers in Ciskei under early system, 349; powers, Natal, 357, 360.

Commission (1903-5), higher education recommendations, 1818; *see also* Union of S. Africa, education (native), race relations.

comparative study, 415-16.

Controller of Native Settlements, duties, 369.

Councils (Bunga): achievements and possible developments, 530-2; Ciskei

Union of S. Africa—Native Administration (*cont.*)

—District, 355-6;—General, its functions, 356;—revenue and expenditure, 356; described by Gen. Smuts, 531; local government powers compared with Kenya, 391; Natives Representative Council—constitution, 366;—education reform proposals rejected, 1217;—election, 153-4; reasons for adoption, 529-32; reserves development, 807; system surveyed, 372-3; Transkei, 530;—development of system, 351-5;—district, 352-3;—revenue and expenditure, 354-5; Transkeian United Territories General Council, 1353-4;—conference of official members, 354;—executive committee, functions, 354; Transvaal local, 362.

developmental work: 369; in Transkei, 355.

developments in policy, 371-2.

differential legislation, 348, 369-71.

Direct Rule, preference for, reasons discussed, 529-32.

district administration, provisions of Native Administration Act (1927), 368-9.

education, *see under* Union of S. Africa, education (native).

Governor-General's powers, 363.

historical background: 346-63; Transkei, 350.

Indirect Rule, objections to, 530.

judicial system: 281-4, 348; chiefs' judicial powers, 263, 284; chiefs' powers under Native Administration Act (1927), 284; Natal Native High Court, 359;—appeals from, 359; Native Appeal Courts, composition and functions, 282-3; native courts—extension of criminal jurisdiction recommended, 284;—recommendations of Native Economic Commission, 284; Transvaal, 361-2; urban native, 509-10.

'Kaffir' question in, 346.

labour, 'civilized' policy and, 369; *see also under* Union of S. Africa, labour (native).

land in 'released' areas, control, 369; *see also under* Union of S. Africa, land (native).

land tenure customs, inquired into,

Union of S. Africa—Native Administration (*cont.*)

838; *see also under* Union of S. Africa, land (native tenure).

law: Bantu customary codified, Natal, 358-9; civil and communal, administration of, 281-3; customary—in Ciskei, 349-50;—exemption from, in Natal, 358;—provisions for revision, Natal, 360;—recognized in Transvaal, 361, 368; *see also under* Union of S. Africa, law (native).

legislative system, 366-8.

lobolo (bride price) recognized by Native Administration Act (1927), 41.

magisterial rule, Ciskei policy, 349.

military aspect, Transvaal, 361.

Natal, present position, 360.

Native Administration Act (1927), 268, 356, 366-8.

Native Affairs Commission constituted, its functions, 365.

Native Affairs Dept.: erosion policy, 1083-4; Ethnological section, 54; functions, 369; organization, 368-9; powers and duties, 364-5.

native authorities, traditional, difficulties of using, 282-3.

native conferences, provisions for, 365-6.

Native Development Account: compilation, 1213-14; grants for, 555; *see also under* Union of S. Africa, education (native).

Native Development Fund, control, 369.

Native Economic Commission (1930-2): finances of native education, opinion on, 1214; improvement of reserves, 1412; increased anthropological study recommended, 57; infant mortality estimates, 128; labour recruitment, recommendations, 652; native courts, recommendations, 284; population data, 111.

Native Labour Commission, defective nutrition, evidence on, 1123.

Native Land and Trust Act (1936), provisions, 365.

Native Recruiting Corporation, labour recruitment, 'assisted voluntary system', 651-2.

Natives Representation Act (1936), 366.

Union of S. Africa—Native Administration (*cont.*)

Native Reserve Boards, functions and composition, Orange Free State, 363.

Native Taxation and Development Act: provisions, 1213-14; its provisions relating to Transkei councils, 354.

policy: British and Dutch, views, 149; in British Kaffraria, 348; early history in Transvaal, 361; population as controlling factor in Natal, 356-7; questions and theory influencing, 346-8; segregation, 247, 500;—its influence, 369;—land distribution, 721-2; S. Rhodesia, comparison, 379; taxation for development, 131; urban communities, 543-4.

political system: Electoral Colleges, 131; electoral system, 153-4; franchise question, 131 (*see also under* Union of S. Africa, franchise); Natives Representative Council, 131; Parliamentary exclusion, 151; *see also under* Union of S. Africa, constitution.

Reserves, *see under* Union of S. Africa, land (native reserves).

residence conditions established by Land Act (1913), 131.

standard of living in reserves needs raising, 1412.

summary and conclusions, 1645.

system: Cape Province, 348-56; Orange Free State, 362-3.

training: for officials, 368-9;—in Bantu studies, 53-4.

treaty policy in Ciskei, 348.

village management boards, Ciskei, 355.

urban areas: administration by Native Affairs Department, 369; numbers resident, 1362; scheduled, 500.

urban native: child welfare, 506; conditions among, 500; co-operative food store, 1471; education provision, 505; housing accommodation, 503-5; judicial system, 509-10; land acquisition by natives in urban areas, 502; legislation controlling locations, 500-2; liquor regulations, 506-7; locations—administrative control, 508-9;—boards, Ciskei, 355;—early period, Natal, 356;—main-

Union of S. Africa—Native Administration (*cont.*)

tenance, provision for, 502-3;—provided, 500-1;—situation of, 508;—system, criticism of early in Natal, 357-8; medical facilities, 505-6; municipal authorities' control, 501-2; Native Advisory Boards, functions, 509; Native Revenue Account for location maintenance, 502-3; Native Township Co-operative Society, 1471; numbers, 500;—limitation, 501-2; recreation facilities, 505; registration and control of, 501; residential regulations, 500; restrictive legislation, 348; slum conditions, 507-8; special problems, 499; trading activities, 506; women in locations, 501.

Nutrition dietaries, Rand labour, 1124.
Onderstepoort Veterinary Laboratory, 1622.

Political and social objectives: 'civilized labour policy' and colour bar, 131; history of, 130; segregation policy advocated, 130; summary and conclusions, 1640; white settlement areas, uniform policy advocated, 132; *see also under* Race Relations; Union of S. Africa, labour, land.

Politics: Dominion party, policy, 146; Labour party—advocates 'segregation', 130;—supports Nationalists, 145; Nationalist party—growth and policy, 145;—in opposition, 146; South African National party, 145;—and defence question, 147.

Pondoland: Flagstaff Agricultural School, 1222; native economy, money, introduction, 1414-15; native land tenure, study by M. Hunter, 898.

POOR WHITES: agricultural depression and increase of, 1365; education, Carnegie Commission's recommendation, 1377; effect of slavery on, 637; employment and status, 685; employment provision, Carnegie Commission's recommendations, 1377; government assistance, 1366-7; governmental policy, 684-6; land policy affected by, 816; numbers, 685, 1365; origin, 684; urban problem, 1365.

POPULATION^{ve}: agricultural, Dutch and British, proportion, 1364-5; Asiatic, 325-6, 1362-3; classification, 107;

Union of S. Africa—Population (*cont.*)

coloured, 109, 1363; density, 2; estimate, 106-7; European—increase, 109;—male, increase, 1363; native policy influenced by, 106-7.

Port Elizabeth, fruit-growing area, 928.

Potchefstroom, university founded by Dutch Reformed Church, 1213.

Press, vernacular publications, 1295.

Race relations: Boer and British in Union of S. Africa, universities' influence upon, 1211; Gen. Botha's views, 145; civilized labour policy, 1607; colour bar, in universities, no legal, 1211; education, native—financial assistance, differential basis, 1213;—higher, financial assistance, differential basis, 1218; Indians, summary and conclusions, 1644-5; segregation, principle of government, 1641; *see also under* Union of S. Africa, political and social objectives; Law; Legislation; Labour, native.

RAILWAYS: administration and control, 1570; agricultural areas served, 1570; agricultural produce freight-rates, rebates, 1368; branch lines (1923-35), 1570; Cape government acquisition and development (1873), 1566; Capetown—East River, 1565; Capetown—Kimberley, 1566; capital investment, 1317; construction difficulties, 1565; early construction, 1565-6; Convention with Portugal (1875), 1567; customs policy, influence on, 1566-7; Customs Union (1903), 1569; Delagoa Bay line, 1567; development prior to Union, 1565-9; electrification, 1571; expenditure on, 1571; finance, 1570, 1607; Inter-Colonial Council control after Boer War, 1568; inter-colonial differences, 1568-9; labour, white unskilled, employment as relief measure, 1369; mileage (1916), (1936), 1570-1; mileage and routes at Union, 1569-70; mines, influence on routes, 1565; Natal government construction (1876), 1566; political influence, 1566-7; policy—agricultural interests, 1607;—'civilized labour', 1607; Pretoria-Delagoa line (1894), 1568; Railway Board Act (1916), 1570; rates competition, inter-colonial, 1568; routes opened by 1895,

Union of S. Africa—Railways (*cont.*)
 1567-8; South Africa Act, provisions regarding, 1570, 1607; Transvaal-Mozambique Convention (1909-34), 1569; unification, conference (1908), 1569; Witwatersrand diggings and demand for, 1566.
 Rainfall, decrease, investigation, 1080.
 Rand labour: dietaries, special study, 1124; recruitment areas, 652; supply, problems of, 1407.
 Research: Grant Board, 1620; institutions, 1626 (*see also under subjects and Universities*); organization, 1620; universities support, 1620.
 Roads: administrative control, early history, 1549-50; construction, early history, 1549-50; Central Road Transportation Board, 1551; finance, 1551; goods and passengers, 1551; maintenance and construction, 1550-1; mileage, 1550; motor services, 1551; National Road Board, functions, 1550-1; National Road Fund, 1550; provincial administration, 1550.
 Royal Society, research work, 1626.
 School of African Life and Languages, government grants, 53-4.
 Simonstown, naval base, 147.
 South Africa Act, *see under* Union of S. Africa, constitution.
 South African Association for the Advancement of Science: anthropological material published, 54; research work, 1626.
 South African Christian Council, Literature Committee formed, 84.
 South African Institute of Race Relations, fellowships for anthropological study granted, 223.
 South African Native Affairs Commission (1903-5), land custom reported on, 838.
 South African Native College, Fort Hare, *see under* Union of S. Africa, education (native, higher).
 South West Africa, commission appointed on change of constitution, 178; *see also under* S.W. Africa, constitution.
 S. Rhodesia, amalgamation and federation proposals, 149, 157, 178-9.
 Statistical Council, recommendations, 112.
 Statistical Department, 1352.

Union of S. Africa (*cont.*)
 Status of the Union Act, *see under* Union of S. Africa, constitution.
 Statute of Westminster, *see under* Union of S. Africa, constitution.
 Survey: cadastral, 6, 8; deficiencies of maps, 5; provincial departments, 6; Surveyors-General, 6; trigonometrical survey, 6.
 TAXATION:
 mines, 1366, 1434;—gold, 545, 548, 1532-3.
 native direct: administrative defects, 558; age of liability, 555; assessment system discussed, 596; collection system, 555-6; defaulters, criminal proceedings against, 556; exemption, provision for, 557; Financial Relations Fourth Extension Act (1922), provisions, 1213; hut tax—in locations and reserves, 554;—quit-rent tenure and exemption, 554-5;—rate and allocation, 555; incidence, question of graduation, 556-7; labour supply, influence on, 1409; Native Development Account, revenue and expenditure, 555; Native Taxation and Development Act, provisions, 554, 1213-14; payment, date and system, 556; poll tax, rate and allocation, 554; principles influencing policy, 554; provinces debarred from imposing, 1213; rates, general and local, 1213-14; receipt, police use of, 557-8; revenue, general decrease, 1214; urban population, anomalies, 600.
 native and non-native direct, exemptions, 549.
 non-native direct: 546-9; gold-mining, 546, 548, 1532-3; income tax—incidence, 548-9;—provincial, 548;—rates, 546-8;—rebates introduced, 546; land values, Transvaal Indigency Commission recommendation, 816.
 petrol, 1551.
 Trade and Industries: Asiatic employment in, 1363; clothing trade, coloured girls employment, 1363; European trader, functions fulfilled in: native reserves, 1415; gold refining, Rand Refinery, 1535; metal industry—bullion refining, 1535;—smelting works, 1535-6; native—exchange system, beginnings

Union of S. Africa—Trade and Industries (*cont.*)

of, 1414-16;—industrial employment, increase, 1362;—licensing experiments for traders, 1415;—urban native and restrictions, 506; pig-iron industry—South Africa Iron and Steel Industrial Corporation, Ltd., 1536; trade with non-British territories in Congo zone, 1343.

Trade Unions: 686; colour-bar policy, 688-9; Industrial and Commercial Union, native organization, 689; native admission, 686; native combinations, legislation, 689.

Transport, air: control, Civil Air Board, 1599; finance, 1601; Rhodesia and Nyasaland Airways, extension Johannesburg—Lusaka service, 1599; state service, South African Airways, 1599; subsidy—civil aviation, 1601;—Imperial Airways, 1601; trans-African—agreement for interterritorial air mail line, 1597;—Cairo—Capetown service, 1597;—South African Airways Johannesburg service, 1597; wireless D/F stations, 1599.

Universities: research activities, 1620; *see also under subjects and Universities.*

Vital statistics, compulsory registration in rural areas recommended, 111-12.

WATER SUPPLY:

artesian sources, 1033-4.

boreholes: average supply, 1033; cost, 1033; depth, 1033; government action, 1033; number completed, 1033; surveys undertaken, 1033.

dams, small: anti-erosion value of, 1034; cost and construction, 1082-3; government assistance, 1034.

Drought Investigation Commission: cattle paddocking recommended for erosion control, 1067; opinion on rainfall, 1060; recommendations, 1032; report, 1026, 1080; veld fires, opinion of, as cause of erosion, 1067-8.

drought losses, 1026.

irrigation: agricultural area irrigated, 1030; areas requiring, 1026-7; Commission set up, 1029; cost as limiting development, 1031-2; flood system, 1027-8;—cost, 1028; government action and expenditure, 1028-30; Hartebeestpoort and Oliphant

Union of S. Africa—Water Supply (*cont.*)

River Works, 1029-30; irrigable area, 1030-1; legal questions arising, 1029; state expenditure, 1030; storage system, 1028; Vaal Hartz scheme, 1029-30.

policy, summary and conclusions, 1653.

rainfall: 1027; and run-off, 1031.

rain-water, wastage and conservation, 1082-3.

Rand Water Board, 1030.

reservoirs, silting-up question, 1031.

river silting, 1081.

shrinkage, 1079.

stock-raising requirements, 1032.

storage problem, 1031.

Water Board, functions, 1029.

watershed protection by afforestation control, 989, 1082.

Witwatersrand Native Labour Association, private recruitment of labour by, 651-2.

Witwatersrand University, *see under Universities.*

Zulu question in, 346.

Union of South Africa: Provinces

CAPE PROVINCE:

agriculture: fruit production, 927-8; veld burning experiments, 1068.

Cape Native Laws and Customs Commission (1883), 300.

census in, 110.

climate, 13.

Constitution Ordinance, provisions for native education funds, 1213.

education: European—compulsory age limit, 1210;—school boards, functions, 1210; native—early history, 1218-19;—financial provision for, 1215;—language policy, 1223;—literary character criticized, 1218;—local committees, use of, 1217;—primary, free, 1215;—primary, state school, 1215;—state-aided schools, numbers, 1215;—teachers' salaries, payment, 1215; Ordinance (1921) provisions, 1210.

Fingoes settled in Smith-Calderwood locations, 843.

Franchise: Cape native and British public opinion, 130; native, 150;—modified by Representation of Natives Act, 131.

Union of South Africa: Provinces—
 Cape Province (*cont.*)
 Glen Grey Act, labour policy, 638.
 health and medicine: disease, typhus,
 tick, prevalence, 1137.
 irrigation system, 1027-8.
 land: policy under Cape Colony,
 718-19; tenure—Glen Grey system,
 867;—Native Laws and Customs
 Commission (1883) recommenda-
 tions, 843.
 mining regulation, 1524.
 native administration system, 348-56.
 CISKEI:
 agriculture, chicken, native industry,
 930.
 councils: revenue and expenditure,
 356; system, 355-6.
 erosion, extent and control, 1083.
 Fort Cox agricultural school, 1222.
 General Council, creation and func-
 tions, 356.
 health and medicine, typhus, endemic,
 1137.
 judicial powers of chiefs in, 284.
 land policy in early settlement, 719.
 location boards, 355.
 native administration in: 349-50;
 native authorities, absence of tradi-
 tional, 529; native customary law
 in, 349-50; policy of magisterial rule,
 349.
 reserves, population density, 806.
 treaty policy in, 348.
 village management boards in, 355.
 NATAL:
 agriculture: livestock, chicken, native
 breeding, 930; sugar, experiment
 station, 946-7;—production, 928-9;
 veld burning, value, 1068.
 chiefs: judicial powers, 284, 357;
 powers, 357, 360.
 education: European—compulsory age
 limit, 1210;—language medium,
 legal provisions, 1212;—school
 boards not established, 1210; native
 —government schools, 1215;—lan-
 guage policy, 1223;—local commit-
 tees, use of, 1217;—local school
 committees, 1215; Royal Charter,
 provisions for native education
 funds, 1213.
 Empire Cotton Growing Corporation
 research station, 945.
 franchise, native, 150.

Union of South Africa: Provinces—
 Natal (*cont.*)
 government of, before Union, 150.
 judicial system: High Court, 359;
 penal system, experiments in collec-
 tive responsibility, 310.
 labour: indentured Indian introduced,
 638; native recruitment through
 taxation, 638.
 land: Native Trust (1864), 719; re-
 serve system, 719; tenure, native—
 acreage held in individual title, 846;
 —individual titles introduced, 843;
 —modifications in system, 842-3.
 language: 82; Zulu Dictionary, 82.
 law: Bantu law codified, 358-9; cus-
 tomary law codified and recognized,
 268, 357; effect of codification, 309;
 'exemption' system from native law,
 358; Natal Code, provisions for re-
 vision, 360; Pass Laws, 667.
 'locations': in early period, 356; system
 criticized, 357-8.
 locust extermination provisions, 616.
 malaria control, 1126.
 mining regulation, 1524.
 native administration: historical back-
 ground, 356-7; Lieutenant-Gover-
 nor as Supreme Chief, 357; policy
 in early period, 356-7; present posi-
 tion, 360; recommendations, 360.
 Native Commission (1881-2), land
 custom reported on, 838.
 population: density in reserves, 806;
 native, as controlling factor, 356-7;
 records, 110.
 taxation: hut tax for labour recruit-
 ment, 638; non-native direct—in-
 come, rates, 548;—personal, rates,
 548.
 Zululand incorporated, 358.
 ORANGE FREE STATE:
 creation of, 130.
 education: European—compulsory age
 limit, 1210;—school boards, func-
 tions, 1210;—secondary, bilingual
 schools, 1212; native—language
 policy, 1223;—local committees, use
 of, 1217.
 franchise, native, 150.
 health and medicine, typhus, endemic,
 1137.
 high veld, 4.
 judicial powers of chiefs: 284, 363;
 system in, 363.

Union of South Africa: Provinces—
 Orange Free State (*cont.*)
 land: Board constituted (1907), 815;
 native reserves, 720; tenure, native
 acreage held in individual title,
 846.
 native administration in, 362-3.
 native customary law, recognition
 limited, 268.
 Native Reserve Boards, functions and
 composition, 363.
 Pass laws in, 665, 666-8.
 population records, 110.
 taxation, non-native direct: income,
 rates, 548; personal, rates, 548.
 Witzieshoek reserve, land tenure,
 family holdings demarcated, 843.

TRANSKEI:
 agricultural training schools, 1222.
 agriculture, native: journal published,
 966; Tsolo School and stock breed-
 ing, 975.
 Bunga, *see under* Union of S. Africa,
 Transkei General Council.
 Central Council, revenues, 555.
 conference of official members of coun-
 cil, 354.
 co-operation, native farmers associa-
 tions, 1471.
 co-operative societies, 1470.
 Council development in Transkei,
 Taxation and Development Act pro-
 visions, 351-5.
 dam construction, 1034.
 developmental work, 355.
 district councils in: 352-3; their
 revenue and expenditure, 354-5.
 education, native higher, Fort Hare
 Native College, support, 1218.
 erosion: extent and control, 1083.
 Europeanizing influences, effects, 530.
 Executive Committee of Council, its
 functions, 354.
 expenditure, erosion control, 1083.
 General Council: achievements, 530;
 co-operation proposed by, 1470;
 financial support, Fort Hare Native
 College, 1218; functions and consti-
 tution, 353-4; interest in agricul-
 tural training, 1222; labour recruit-
 ment abuses, 652.
 Glen Grey Act applied to, 352.
 health and medicine, typhus, endemic,
 1137.
 judicial powers of chiefs in, 284.

Union of South Africa: Provinces—
 Transkei (*cont.*)
 labour, mine, travelling expenses borne
 by, 657.
 land: policy, 719; tenure, 867;—
 native, provisions of Glen Grey Act
 applied, 844;—system compared
 with Glen Grey district, 844-5.
 language area, 82.
 native administration: description,
 350-5; erosion control work, 1083;
 historical background, 350.
 native law applied, 268.
 population: density of, 2; reserves,
 density in, 806.
 press, vernacular publications, 1295.
 Spoor Law as collective punishment,
 315.
 Transkeian territories, formation of,
 350; *see also under* Union of S. Africa,
 native administration.

TRANSVAAL:
 Administrator as supreme chief, 361.
 agriculture, tobacco production, 925.
 Barberton, Empire Cotton Growing
 Corporation station, 945.
 Constitution, original definition of
 racial inequality quoted, 130.
 corporal punishment, pass system
 breach, 665.
 creation of, 130.
 education: European—compulsory
 age limit, 1210;—school boards,
 functions, 1210; native—language
 policy, 1223;—local committees, use
 of, 1217;—state primary school,
 1215.
 franchise, native, 150.
 health and medicine: disease, tick
 typhus, prevalence, 1137; Transvaal
 Bilharzia Committee, educational
 campaigns, 1147.
 high veld, 4.
 Indigency Commission (1906-8): agri-
 cultural recommendations, 815-16;
 description of labour relations, 637.
 judicial system: description, 361-2;
 powers of chiefs in, 284.
 land policy: affected by gold mining,
 815; before Union, 720.
 land tenure, native, acreage held in
 individual title, 846.
 language in, 82.
 local native councils, 362.
 mines: Precious and Base Metals Act,

Union of South Africa: Provinces—
Transvaal (*cont.*)

state administration set up, 1515-16;
tin, state administration, 1515.

mining: history of, 1522-3; legislation,
1522-4; regulations, 1524.

native administration: early policy,
361; military aspect, 361; native
authorities, influence of, 529-30.

native customary law, recognition,
268, 361.

Pass laws in, 665, 666-8.

population records, 110.

Roman-Dutch law applied, 361.

Sotho language, 82.

taxation: native direct, special tax im-
posed, 1213; non-native direct—
exemptions, 549;—income tax, rates,
548;—personal tax, rates, 548.

ZULULAND: erosion, extent and control,
1083-4; incorporated in Natal, 358;
judicial powers of chiefs, 284; labour
recruitment, historical, 637; land
policy, 719-20; penal system, experi-
ments in collective responsibility,
310; reserves, population density, 806.

United Africa Company: ghee factories
in Nigeria, 943; Nigerian timber ex-
port, 1013; rubber lease in Nigeria, 770.

United Free Church of Scotland, Nyasa-
land concession acquired, 755.

UNITED STATES OF AMERICA:

African languages studied, 101-2.

anthropological studies, 56.

Berlin Act signatory, 1341.

cinema films from, in Africa, 1300.

erosion: 1073-5; control methods,
1074-6; effect on reservoirs, 1060;
Great Plains, 1074; gullying, 1058;
sheet, area affected, 1073; wind,
1059.

export, cotton piece goods: Kenya,
decline, 1336; Uganda, decline,
1336.

forests, destruction, extent, 1073.

ground water-table, fall, 1061.

imports: cocoa, 1332; from British
African dependencies, percentage,
1330.

livestock: destocking methods, 1070;
overstocking problem, 1073-4.

Navajos Indians objections to, destock-
ing, 1076.

Nevada training for prospectors,
1529.

United States of America (*cont.*).

Treaty of St. Germain ratified, 1342.

Soil Conservation Service, 1075-6.

Universities.

Aberdeen: Bureau of Nutrition, 1160;
forestry training, 992; Rowett Insti-
tute, research work, 1618.

Aberystwyth: agricultural research,
944; Geography and Anthropology,
Chair, 51.

Antwerp, Colonial University: an-
thropological studies, 55; language
studied, 71; training for colonial
service, 242.

Bangor University College, forestry
training, 992.

Berlin: anthropological studies, 56;
language studies, 72.

Brussels, anthropological studies, 55.

Cambridge: agricultural research, 944;
Anthony Williams Studentship for
research in ethnology, 53; colo-
nial service training at, 224;
Forestry School, 992; Plant Breed-
ing Institute, School of Agriculture,
research at, 944; School Examina-
tions Syndicate, African examina-
tions, 1254; Social Anthropology,
chair of, 51.

Capetown: African Life and Lan-
guages—chair founded, 1211;—im-
portance of, 44; Bantu—languages
professorship, 73;—studies and social
anthropology, 53; non-European
students, 1211; School of African
Life and Languages founded, 44.

Chicago, study of African languages,
101.

Cologne, anthropological studies, 56.

Columbia: anthropological studies, 56;
studies of African languages, 101.

Copenhagen, African linguistics, 102.

Durham: Fourah Bay College affil-
ated, 1250.

Edinburgh: animal genetics, research,
944; forestry school at, 991-2;
Tweedie Exploration Fellowship, re-
search in anthropology, 53.

Ghent, anthropological courses, 55.

Göttingen: anthropological studies,
56.

Hamburg: anthropological studies, 56;
language studies, 72.

Harvard, anthropological studies, 56.

Universities (*cont.*)

Johannesburg, Bantu Language professorship, 73.

Leipzig: anthropological studies, 56; languages studied, 72.

Liège, anthropological courses, 55.

Liverpool, School of Tropical Medicine, 1160.

London: examinations, adaptation for Africans, 1254; King's College, Yaba College connected, 1250; linguistic work, 73, 102; School of Economics, anthropological training, 51; School of Hygiene and Tropical Medicine, 1159;—animal husbandry, work relevant to, 944;—helminth research, 1146;—Ross Institute incorporated, 1125;—suggested centralization of colonial medical research, 1204; School of Oriental Studies, 1621;—African department expanded, 72;—finances, 73, 1621;—lectureship in African linguistics, 102; Social Anthropology, Chair, 51.

Louvain: anthropological studies, 55; *Cadulac*, objects and functions, 953; colonial agriculture studied, 953; *Fondation Médicale*, 1178; *see also under* Belgian Congo, *Fomulac*; soil science research, 953.

Manchester, geography and anthropology, studies, 51.

Munich, anthropological studies, 56.

North-western, anthropological studies, 56.

Oslo, African linguistics, 102.

Oxford: African Sociology, Lecture-ship, 51; agricultural research, 944; colonial service training at, 224; Forestry School, 992; Social Anthropology, Chair, 51; Social Studies Research Committee, 1620;—project for Kenya, 52-3; soil science studied, 944.

Paris: ethnological jurisprudence section of Faculty of Law, 55; Institute of Linguistics, 102.

Pennsylvania, anthropological studies, 56.

Potchefstroom, Afrikaans speaking, 1212.

Pretoria: agricultural research and training, 945-6; anthropology and native administration lectures, 1211; Bantu studies and social anthropo-

Universities (*cont.*)

logy, 53; Dutch character asserted, 1212-13.

of South Africa: Bantu phonetics, 76; Beit Scholarships tenable at, 1224-5; composition of, 1210; degrees, examinations at Fort Hare Native College, 1218; Inter-University Committee, 83; pasture research work, 1623; research work, 1620.

South African Native College, Fort Hare, *see under* Union of S. Africa, education, native (higher).

Stellenbosch: Afrikaans as instruction medium, development, 1212; Bantu studies, 53, 1211; Botanical Dept., forestry research, 1009; Stellenburg-Elsenburg College of Agriculture, formation, 945.

Wisconsin, study of African languages, 102.

Witwatersrand: agricultural research, 945; anthropology, social, taught, 1211; Bantu studies—and anthropology, 53;—department of vernacular literature, publications, 84;—Zulu dictionary, 82; Botanical Dept., forestry research, 1009; forest pests and diseases studied, 1017; Frankenwald Estate research station, 945; languages, native, taught, 1211; law, native, taught, 1211; Medical School, research work, 1155; Mineral Research Laboratory, 1491; native administration taught, 1211; native medical training at, recommendations, 1184; non-European—library, 1294;—students, 1211; Zulu language assistant, appointment difficulties, 1212.

Yale, study of African languages, 101.

Urban areas, natives in, *see under* Native Administration, urban native.

Usagara Trading Company, operations in Tanganyika, 1390.

V

Vaal river, system, 4.

Vanderkemp, Dr., medical missionary among Hottentots, 1115.

Vatican: concordat with Leopold II, 1270; health work, Papal Encyclical (1936), 1119.

Vegetation: 11-15; cover, most efficient, 1061; reduction of, and erosion, 1056-61.

Venda language, 81, 82, 83.

Vendryès, Prof., Prof. of Linguistics at Paris University, 102.

Veneral diseases, labour migration and spread of infection, 705; *see also under* Health and Medicine, disease.

Vermoesen, M., forest studies, 1012.

Vernacular, *see under* Language.

Vihamba, Chaga lands, enclosure, 847.

Villamur, M., and Delafosse, M., land tenure customs of Agni described by, 840.

Vint, Dr. F. W., studies of mental capacity of Africans, 37.

VITAL STATISTICS: Belgian Congo—missions and records, 121;—provisions, 114;—records of, 121-2; Cameroons, Fr. Mand., provisions for, 124; extension of necessary, 126-7; Fr. W. Africa provision for, 123; Gold Coast registration system, 119; importance in Africa, 103-4, 1639; inadequacy, 127-9, 1122; lack of and question of health organization, 1204-5; Nigeria, 118; Nyasaland, Fort Manning district, 113; registration proposals, 110-11, 1639; Sierra Leone, 120; S.W. Africa, 112; Tanganyika—Kahama District, 114;—provisions for, 114; Togoland, Br. Mand., 119; Uganda, registration system, 117; uniform system urged, 129; Union of S. Africa, extension to rural areas urged, 112.

van Vollenhoven, Governor-General of Fr. W. Africa: conscription of natives opposed, 627; native administration policy of, 487.

Volta river navigation, 1543.

Voortrekkers, northward trek (1836), 130, 1310.

W

Wabena people, land alienated to Ngoni, 836.

Wakils, Nigerian emirs, governors' status, 419.

Wallace, Edgar, book sales on West Coast, 1294.

Wanger, Father, quoted, 100.

Ward, Dr. Ida: investigations into Ibo, 92; language studies, 72, 91; research expedition, 73.

Warren, Sir C.: intervention in Bechuanaland, 403; negotiations with Bechuana chiefs, 404.

WATER SUPPLY:

African conditions and importance of, 1025.

artesian supplies: Nigerian resources, 1047; N. Rhodesia, 1040; Union of S. Africa, 1033-4.

boreholes, construction: in Bechuanaland, 1037; in Kenya, 1043; in N. Rhodesia, 1040; in S.W. Africa, 1035; in S. Rhodesia, 1040; in Tanganyika, 1044-5; in Uganda, 1046; in Union of S. Africa, 1033-4.

catchment tanks preferable to wells, 1062.

Colonial Development Fund: grants, 1036, 1037, 1041, 1043; loans, 1044.

dams: construction—in Bechuanaland, 1037;—in S. Rhodesia, 1039; Union of S. Africa, 1034; small, construction—in S.W. Africa, 1035;—in Swaziland, 1039;—in Union, 1034; surface contour, construction in Bechuanaland, 1037.

development work in Nyasaland, 1040-1.

distribution, and grazing control, 1067.

drinking-water: development of supply needed, 1052; supply—in Tanganyika, 1044-5;—Sierra Leone, 1128.

ecological survey, N. Rhodesia, 954.

effect of erosion on, 1059-60.

exotic tree planting and diminution in, 1013.

floods, increase, 1062.

Gold Coast, 1048.

ground water table: fall and erosion, 1059, 1061; and well sinking, 1062.

improvement, summary and conclusions, 1652-3.

irrigation: administration of irrigated areas, 1053-5; Bechuanaland, 1036; cost and control questions, 1053-4; cultivation in irrigated areas, 1053-5; developments and policy in Union, 1026-33; economic forms of, 1052;—and limits to development, 1025-6; Fr. Equatorial Africa, 1052; Gezira scheme, 1050;—administration, cost, and production, 1053-5;—control and management, 1404;

Water Supply—irrigation (*cont.*)

- settlement, 1054-5; Kalahari proposal, 1036; Kenya, projects and work, 1041-2; land question in irrigated areas, 1053; large-scale projects, future opportunities, 1355; Niger Scheme in Fr. W. Africa, 1048-51; problems, 1052; schemes affected by soil erosion, 1059-60; Senegal rivers, investigation, 1049-50; settlement in irrigated areas, 1053-4; S.W. Africa, 1034-5; S. Rhodesia, 1039-40; Swaziland plans, 1038-9; Tanganyika, 1043-4.
 - Lake Chad area, sub-artesian supplies, 1047.
 - Nigeria, problems and work, 1046-8.
 - population in connexion with, 113.
 - position in Basutoland, 1038.
 - problems and development in French dependencies, 1048-52.
 - protection of, as anti-erosion measure, 1109, 1112.
 - reduction through erosion, 1060.
 - research into resources indicated, 1613.
 - reservoirs: Gold Coast underground, native system, 1048; silting-up in Union, 1081.
 - river silting and clearing, Bechuanaland, 1036.
 - rivers: disappearance, Nyasaland, 1089; reduction through erosion, 1061-2.
 - savannah forest, in conservation of, 985.
 - sources, vegetal covering, research needed, 1613.
 - Southern Sahara area, shrinkage of, 1104.
 - tsetse free, measures to provide, 1131.
 - Uganda, 1045-6.
 - water rights, legal position: Kenya, 1043; Tanganyika, 1045.
 - wells, construction; Bechuanaland, 1037; Fr. Cameroons, 1052; Fr. W. Africa, 1051-2; Nigeria—Northern Emirates, 1047-8;—Southern Provinces, 1046; Nyasaland, 1041; S.W. Africa, 1035.
 - yellow fever reduced by piped supply, Sierra Leone, 1128.
- Water transport, *see under* Transport and Communications.
- Wayland, E. J., Uganda water supplies surveyed, 1045.

Wellcome Bureau of Medical Research, 1136.

Wemba people, tribal organization, 454.

Werner, Dr. Alice, linguistic scholar, 68, 72.

WEST AFRICA:

- agriculture, research, Empire Cotton Growing Corporation, contributions, 945.
 - coast, tsetse infestation, 1129.
 - disease: gonorrhoea, incidence estimated, 1144-5; prevalence, 1117; relapsing fever, types, 1136; syphilis, incidence estimated, 1144-5; tuberculosis tests initiated by Prof. Calmette, 1138; venereal, wide prevalence reported, 1144; yaws, incidence estimated, 1144-5.
 - economic development, 1396.
 - economic system, native: commerce, progress in, 1424; marketing, co-operative organizations, 1425; markets, local, 1425; money-lending facilities, 1425; specialization and exchange, 1425-6; traders in agricultural products, 1424-5.
 - Fathers of the Holy Ghost, medical work, 1119.
 - Harmattan wind, and erosion, 1059.
 - Hausa invasion, 28.
 - health and medicine, missionary work, 1118, 1119.
 - labour, native industrial employment, 1427-8.
 - missionary mortality, 1117.
 - Negro peoples: density of population, 26; general description of, 26, 28.
 - rainfall, 12.
 - trading enterprises, 1396.
 - urbanization, high degree of, 1426.
- West African Medical Journal*, 1161.
- West Atlantic languages, 76-7.
- West Coast, mines, native workings, 1485.
- West Diamond Syndicate, mining in Gold Coast, 1514.
- Westermann, Prof. D.: classification of languages, 74, 75, 76; linguistic scholar, 68, 72, 74, 75; recommendation regarding Ibo, 92; work on orthography, 80.
- Weybridge veterinary research laboratory, *see under* Great Britain.
- Wiese, K., concession claimed in N.E. Rhodesia, 738.

de Wildeman, M., forest studies, 1012.
 Williams, Sir R.: Benguela line project, 1594; Katanga railway concession, 1573, 1594; Tanganyika Concessions Company formed, 1506-7.
 Wilson, Sir S., visit to E. Africa on closer union question, 189.
 Witchcraft and Magic: belief in, main problem for lawgivers in Africa, 295-6; chicken, ritual uses, 930; common to African tribes, 30-1; legislation on, requires revision, 296; native courts prevented from judging cases, 296; prohibition by law, grounds of criticism, 296.
 Wolof (Jolof) language, 95.
 Wood-Winterton proposals, *see under* Kenya, Indian franchise question.
 Wool, *see under* Agriculture, livestock.
 Worthington, Dr. E. B.: quoted, 4; research needs outlined, 1614.

X

Xhosa language: 81, 82; literature in, 82, 84; manuscripts in, 84; orthography, 81.

Y

Yaba Higher College, *see under* Nigeria, education, native.
 Yakö people, land tenure system, 835, 840.
 Yao language, 87.
 Yorke, Dr. W., trypanosomiasis research, 1130.
 Yoruba language: 76, 91; orthography, 91.
 Yoruba people, political organization of, in W. Africa, 27.
 Yoruba Provinces, *see under* Nigeria.
 Young, Sir E. Hilton, chairman of Commission on Closer Union in E. Africa, 168, 182-3.

Z

Zakkat: Islamic tithe system, and rental system in Senegal, 858; jax in Fr. W. Africa, 589.

Zambesi Bridge: 1541; malaria control measures by Ross Institute, 1125.
 Zambesi river: aridity in S. Africa due to erosion by, theories, 1035-6; boundary, 130; bridge construction, 1577; bridge project at Chirundu, 1553; navigation, 1540; system, 4; traffic, 1540.
 ZANZIBAR: agriculture—crops, cloves, exports, 1327;—research, East African Agricultural Research Station, Amani, centre for, 955; E. African federation proposed, 181-2; education, native—expenditure compared with other British dependencies and Union of S. Africa, 1215;—schools, government, 1233-4;—surveying, 10; exports, cloves, 1327; finance, public, expenditure, social services, 1434; free trade established, 135; health and medicine—disease, tuberculosis amongst Indians, 1140;—missionary work, 1116-17; imports—proportion of British African, 1335;—value per head of population, 1334; Indians in, 318; Interterritorial Language Committee, 90; labour, native, compulsory labour abolished, 618; language in, 90; meteorological service in, 15; missions, Holy Ghost Fathers, medical work, 1116; survey, aerial, 11.
 Zaramo language, 88.
 Zaramu people, political organization of, 23.
 Zaria Emirate, Hausa centre, 28.
 Zebedelia Citrus Estates, research work of, 946.
 Zezuru language, 85.
 Zionist Organization: land offered in Kenya, 745; proposed grant of land in Kenya to, 820.
 Le Zoute, Missionary Conference, native education policy, resolution, 1236.
 Zulu language: 81, 82, 85; dictionary, 82; literature in, 82; orthography, 81.
 Zulu people: initiation and military training, 25; military organization under Chaka, 23; opposition to industrial work, 694; position in S. Africa, 346.
 Zululand, *see under* Union of S. Africa.
 Zulu-Sotho dialect, 82.

PRINTED IN
GREAT BRITAIN
AT THE
UNIVERSITY PRESS
OXFORD
BY
JOHN JOHNSON
PRINTER
TO THE
UNIVERSITY

